



KNOWING — THE — UNKNOWABLE

SCIENCE AND RELIGIONS ON
GOD AND THE UNIVERSE

EDITED BY
JOHN BOWKER

I.B. TAURIS

KNOWING THE UNKNOWNABLE

'Most books on science and religion focus almost exclusively on Western Christianity and its relations with the sciences. This collection is a happy exception, offering a range of fascinating insights from both Christian and Indian religious traditions. Penned by leading scholars in their fields, these thought-provoking essays represent a novel way of exploring the relationship between scientific and religious knowledge, and open up new possibilities for future discussion.'

– *Peter Harrison, Andreas Idreos*
Professor of Science and Religion, University of Oxford

LIBRARY OF MODERN RELIGION

1. *Returning to Religion: Why a Secular Age is Haunted by Faith*

Jonathan Benthall

978 1 84511 718 4

2. *Knowing the Unknowable: Science and Religions on God and the Universe*

John Bowker [Ed]

978 1 84511 757 3

3. *Sufism Today: Heritage and Tradition in the Global Community*

Catharina Raudvere & Leif Stenberg [Eds.]

978 1 84511 762 7

4. *Apocalyptic Islam and Iranian Shi'ism*

Abbas Amanat

978 1 84511 124 3

5. *Global Pentecostalism: Encounters with Other Religious Traditions*

David Westerlund

978 1 84511 877 8

6. *Dying for Faith: Religiously Motivated Violence in the Contemporary World*

Madawi Al-Rasheed & Marat Shterin [Eds.]

978 1 84511 686 6

7. *The Hindu Erotic: Exploring Hinduism and Sexuality*

David Smith

978 1 84511 361 2

8. *The Power of Tantra: Religion, Sexuality and the Politics of South Asian Studies*

Hugh B. Urban

978 1 84511 873 0

9. *Jewish Identities in Iran:*

Resistance and Conversion to Islam and the Baba'i Faith

Mehrdad Amanat

978 1 84511 891 4

10. *Islamic Reform and Conservatism:*

Al-Azhar and the Evolution of Modern Sunni Islam

Indira Falk Gesink

978 1 84511 936 2

11. *Muslim Women's Rituals: Authority and Gender in the Islamic World*

Catharina Raudvere and Margaret Rausch

978 1 84511 643 9

KNOWING THE UNKNOWNABLE

Science and Religions on God and the Universe

Edited by
John Bowker

I.B. TAURIS

LONDON · NEW YORK

Published in 2009 by I.B.Tauris & Co Ltd
6 Salem Road, London W2 4BU
175 Fifth Avenue, New York NY 10010
www.ibtauris.com

In the United States of America and Canada distributed by Palgrave Macmillan
a division of St. Martin's Press, 175 Fifth Avenue, New York NY 10010

Copyright © John Templeton Foundation, 2009

The right of the John Templeton Foundation to be identified as Licensor
and John Bowker as Editor of this work has been asserted by them in accordance
with the Copyright, Designs and Patent Act 1988.

All rights reserved. Except for brief quotations in a review, this book, or any
part thereof, may not be reproduced, stored in or introduced into a retrieval system, or
transmitted, in any form or by any means, electronic, mechanical, photocopying, recording
or otherwise, without the prior written permission of the publisher.

Library of Modern Religion, Vol. 2

ISBN: 978 1 84511 757 3

A full CIP record for this book is available from the British Library

A full CIP record is available from the Library of Congress

Library of Congress Catalog Card Number: available

Typeset in Monotype Garamond by Ellipsis Books Limited, Glasgow
Printed and bound in Great Britain by T J International Ltd, Padstow, Cornwall

CONTENTS

<i>Acknowledgements</i>	vii
<i>Notes on Contributors</i>	viii
<i>Preface</i>	xiii
Introduction: The Unknowable as Invitation in Science and Religion	
1	1
<i>John Bowker</i>	
1. A Taxonomy of Absence	
35	35
<i>John Rodwell</i>	
2. Understanding the Radiant Sun: The Unknown and the Unknowable in an Example of Scientific Approach	
45	45
<i>Ramanath Cowsik</i>	
3. From the Unknowability of the Universe to the Teleology of Reason: A Phenomenological Insight into Apophatic Cosmology	
63	63
<i>Alexei V. Nesteruk</i>	
4. On Knowing the Unknowable: Immanuel Kant and the Unknowable Real	
87	87
<i>Keith Ward</i>	
5. Three Forms of Negativity in Christian Mysticism	
99	99
<i>Bernard McGinn</i>	
6. On Clouds and Veils: Divine Presence and 'Feminine' Secrets in Revelation and Nature	
123	123
<i>Sarah Coakley</i>	

7.	Knowing the Unknowable about God and the Universe: Humility, Hope and the End of Knowledge <i>Oliver Davies</i>	161
8.	The Unknowable Not Unknown: The Poetry of R. S. Thomas <i>Margaret Bowker</i>	175
9.	Knowing the Unknowable in Indian Traditions: Representation, Absence and Cosmology <i>Gavin Flood</i>	189
10.	Some Theological Reflections on Buddhism and the Unknowability and Hiddenness of God <i>Paul Williams</i>	201
11.	Divine Absence and the Purification of Desire: A Hindu Saint's Experience of a God Who Keeps his Distance <i>Francis X. Clooney, SJ</i>	227
	Afterword: Knowing the Unknowable <i>Rowan Williams</i>	257
	<i>Index</i>	263

ACKNOWLEDGEMENTS

I am grateful to the contributors to this book for taking so much time and trouble in writing and revising their chapters after the initial discussions in Cambridge. The thanks of all of us go to the Templeton Foundation for sponsoring this symposium and to Henk Keers who contributed to the cost of production. Together they have brought this book into being. Particular thanks go to Charles Harper for the inspiring way in which he participated in the discussions that led to the selection of this particular topic of ‘unknowability’, and for his contributions to the meeting in Cambridge. Above all, a great debt of gratitude is owed to Mary Ann Meyers, who not only undertook the organisation of the whole enterprise, but made such helpful contributions to the Trinity gathering. She also undertook the final preparation of the manuscript for the press when my own illness made that task impossible. Without her, the book would not exist.

The editor and publishers are grateful to Faber & Faber for use of W. H. Auden’s *Collected Poems* (1994), to J. M. Dent for use of R. S. Thomas’s *Collected Poems* (1993); and to Bloodaxe for use of his *Collected Later Poems* (2004).

NOTES ON CONTRIBUTORS

Editor and Contributor

John Bowker, an Anglican priest and honorary canon of Canterbury Cathedral, is a pioneering religious studies scholar who has written on the Bible and other sacred texts, the nature of religion, contemporary religious beliefs, and on moral, aesthetic and religious judgements in the light of neuroscience. He has also written and edited widely read surveys of world religions. He has been Professor of Religious Studies at Lancaster University, a Fellow, Director of Studies, and Dean of Chapel at Trinity College, Cambridge, and Gresham Professor of Divinity at Gresham College, London University. His many books include *The Sacred Neuron: Amazing New Discoveries Connecting Science and Religion* (2005, 2007), *Beliefs That Changed the World: The History and Ideas of the Great Religions* (2007), *Conflict and Reconciliation: The Contribution of Religions* (2008), and (with Sonia Halliday and Bryan Know) *The Aerial Atlas of the Holy Land* (2008). He has also edited *The Oxford Dictionary of World Religions* (1997, 2000) and *The Cambridge Illustrated History of Religions* (2002).

Contributors

Margaret Bowker is a historian of early modern English history. She was a Fellow at Girton College, Cambridge, a Lecturer in History at Cambridge University and a Reader in History and in Educational Research at Lancaster University before retiring as a research scholar at Corpus Christi College and at Ridley Hall, Cambridge. She edited *An Episcopal Court Book for the Diocese of Lincoln, 1514–1520* (1967) and is the author of *The Secular Clergy in the Diocese of Lincoln 1495–1520* (1968, 2008) and *The Henrician Reformation: The Diocese of Lincoln under John Longland, 1521–1547*, (1981, 2008). She has contributed to *World Religions* (1997), edited by John Bowker, and to *The Oxford Dictionary of World Religions* (1997) and *The Oxford Dictionary of National Biography* (2004).

Francis X. Clooney, SJ is Parkman Professor of Divinity and Professor of Comparative Theology at Harvard Divinity School. Formerly Professor of Comparative Theology at Boston College, he has written widely on Hindu religious traditions and their implications for Christian theology. He is the author of twelve books, including *Seeing the Texts: Doing Theology among the Srivaishnavas of South India* (1996), winner of the Best Book Award in Hindu-Christian Studies, and, most recently, *Divine Mother, Blessed Mother: Hindu Goddesses and the Virgin Mary* (2005) and *Fr. Bouchet's India: An 18th Century Jesuit's Encounter with Hinduism* (2006). His *Beyond Compare: St. Francis de Sales and Sri Vedanta Desika on Loving Surrender to God*, and *The Truth, the Way, the Life: Christian Commentary on the Three Holy Mantras of the Srivaishnava Hindus* are forthcoming.

Sarah Coakley is Norris-Hulse Professor of Divinity at Cambridge University and was previously Mallinckrodt Professor of Divinity at Harvard Divinity School. Her books include *Christ Without Absolutes: A Study of the Christology of Ernst Troeltsch* (1988), *Powers and Submissions: Spirituality, Philosophy and Gender* (2001); she is editor of *Religion and the Body* (1997), *Rethinking Gregory of Nyssa* (2002) and three collaborative volumes specifically on the interface of science and religion (with Kay Shelemay), *Pain and Its Transformations* (2007), *Spiritual Healing: Science, Meaning and Discernment* (forthcoming) and (with Martin A. Nowak), *Evolution, Games and God: The Principle of Cooperation* (forthcoming). She is currently working on a four-volume systematic theology for Cambridge University Press. The first volume will appear as *God, Sexuality and the Self: An Essay 'On the Trinity'*. She is an Anglican priest in the diocese of Ely.

Ramanath Cowsik is a Professor of Physics at Washington University in St Louis and the Director Emeritus and the Vainu Bappu Distinguished Professor of the Indian Institute of Astrophysics in Bangalore. He was formerly in charge of the Gravitation Group at the Tata Institute of Fundamental Research in Bombay. His papers pointing out the astrophysical and cosmological consequences of finite neutrino masses contributed to the basic paradigm for studying galaxy formation and dark matter. He also has contributed to the understanding of the behaviour of cosmic rays at low and high energies, and his discussion of non-thermal particle populations inside supernova remnants have led to a physical understanding of their spectra. He is the editor of *Cosmic Pathways* (1985) and two other books.

Oliver Davies, the Professor of Christian Doctrine at King's College, London, is a theologian whose research and writing has focused on the language of Christian texts and on the classical problems of metaphysical theology. His work has ranged from studies of medieval mysticism inspired by phenomenology to more systematic theology influenced by contemporary thinking in rabbinics and hermeneutics. He formerly taught at the University of Cologne and the University of Wales. His books include *God Within: The Mystical Tradition of Northern Europe* (1988), *Meister Eckhart: Mystical Theologian* (1991), *Celtic Christianity in Early Medieval Wales: The Origins of the Welsh Spiritual Tradition* (1996), *A Theology of Compassion: Metaphysics of Difference and the Renewal of Tradition* (2003), *The Creativity of God: World, Eucharist, Reason* (2004) and, most recently (with Clemens Sedmak and Paul D. Janz), *Transformation Theology: Church in the World* (2008). He also co-edited (with Denys Turner) *Silence and the Word: Negative Theology and Incarnation* (2002). With Paul Janz and Clemens Sedmak he co-edits the series Transformation Theology.

Gavin Flood, a religious studies scholar whose research and writing has focused on South Asian traditions, particularly Kashmiri aivism, is Professor of Hindu Studies and Comparative Religion at Oxford University where he is also the academic director of the Oxford Centre for Hindu Studies. His work has involved the interpretation of Sanskrit texts and the exploration of the relationship between self, text and cultural tradition in a comparative context. He was formerly Professor of Religious Studies at the University of Stirling. He has edited two books, most recently, *The Blackwell Companion to Hinduism* (2003), and is the author five others, *Body and Cosmology in Kashmiri aivism* (1993), *An Introduction to Hinduism* (1996), *Beyond Phenomenology: Rethinking the Study of Religion* (1999), and *The Ascetic Self: Subjectivity, Memory, and Tradition* (2004) and *The Tantric Body: The Secret Tradition of Hindu Religion* (2006).

Bernard McGinn, the Naomi Shenstone Donnelley Professor Emeritus at the University of Chicago Divinity School, is widely regarded as the pre-eminent scholar of mysticism in the Western Christian tradition. He has also written extensively on Jewish mysticism, the history of apocalyptic thought and medieval Christianity. A fellow of the American Academy of Arts and Sciences and of the Medieval Academy of America, his edited books include two volumes of the works of Meister Eckhart and (with John J. Collins and Stephen J. Stein) *The Continuum History of Apocalypticism* (2003). He is the author of many books, the most recent being *The Harvest of Mysticism in Medieval Germany (1300-1500)* (2005). Among his other works are *The Doctors of the Church: Thirty-Three Men and Women who Shaped Christianity* (1999), *Meister Eckhart's Mystical Thought: The Man from Whom*

God Hid Nothing (2001) and, with his wife Patricia Ferris McGinn, *Early Christian Mystics: The Divine Vision of the Spiritual Masters* (2003).

Alexei V. Nesteruk is a Senior Lecturer in Mathematics at the University of Portsmouth and a Visiting Professor at St Andrew's Biblical and Theological College in Moscow. His research focuses on problems in foundations of cosmology and their links with philosophical theology. He has turned increasingly to writing about science from the perspective of his own Eastern Orthodox tradition. He is the author of *Light from the East: Theology, Science and the Eastern Orthodox Tradition* (2003) and *The Universe as Communion: Towards a Neo-Patristic Synthesis of Theology and Science* (2008).

John Rodwell, a professional ecologist, is an Anglican priest and honorary canon of Blackburn Cathedral. He was coordinator of the first systematic and comprehensive inventory of the vegetation of the United Kingdom and editor of the five-volume *British Plant Communities* (1991–2000). He was formerly Professor of Plant Ecology at Lancaster University and now works independently as a consultant. He is currently working on the notion of naming in science/blessing by faith and preparing a collection of theological writings on creation and creativity.

Keith Ward, former Regius Professor of Divinity at Oxford University and canon of Christ Church, Oxford, is one of Britain's foremost writers on Christian belief and doctrine in the light of modern scientific discoveries and in the context of other faith traditions. He has explored the tensions between the classical tradition of natural theology, with its atemporal and self-sufficient God, and the biblical idea of a creative and responsive God, has critically examined recent secular theories of human nature, compared the place of revelation and concept of creation in the major world religions and sketched a revised Christian vision that looks to a convergent global spirituality. He was previously F. D. Maurice Professor of Moral and Social Theology at the University of London and Professor of the History and Philosophy of Religion there. A fellow of the British Academy, he is the author of twenty-eight books on theology and philosophy, including a five-volume comparative theology, and, most recently, *Pascal's Fire: Faith and Religious Understanding* (2006), *Is Religion Dangerous?* (2006), *Re-thinking Christianity* (2007), *The Big Questions in Science and Religion* (2007), *Religion and Human Fulfilment* (2008) and *Why There Almost Certainly Is a God: Doubting Dawkins* (2008).

Paul Williams is Professor of Indian and Tibetan Philosophy and founding co-director of the Centre for Buddhist Studies at the University of Bristol. His work has focused on Madhyamaka Buddhist philosophy, a school of Buddhism that developed in India two millennia ago and has had wide influence on Buddhist thought throughout India, Tibet and East Asia. He also has written on western philosophical and mystical theology. He is editor of the eight-volume series *Buddhism: Critical Concepts in Religious Studies* (2005), co-author (with Anthony Tribe) of *Buddhist Thought: A Complete Introduction to the Indian Tradition* (2000), and the author of five books: *Mahayana Buddhism: The Doctrinal Foundations* (1989; revised 2008), *A Tibetan Madhyamaka Defence of the Reflexive Nature of Awareness* (1996), *Altruism and Reality: Studies in the Philosophy of Bodhicaryavatara* (1998) and *The Unexpected Way: On Converting from Buddhism to Catholicism* (2001). His most recent book, *Songs of Love, Poems of Sadness: The Erotic Verse of the Sixth Dalai Lama*, a translation from the Tibetan with an introductory essay, was published in 2004.

Rowan Williams is a theologian and a poet who was enthroned as the 104th Archbishop of Canterbury in 2003. He was Lady Margaret Professor of Divinity at Oxford University before he was consecrated as Bishop of Monmouth in 1992. Eight years later, he was elected Archbishop of Wales. Deeply influenced by the rich spiritual tradition of Christianity, he rigorously quarries tradition to address ‘moments of significant newness’ in the history of the church. Archbishop Williams is a fellow of the British Academy. His principal academic focus has been patristic theology, and an especially important contribution to the field was his *Arius: Heresy and Tradition* (1987 and 2001). His recent books include *Christ on Trail* (2000), *Lost Icons: Reflections on Cultural Bereavement* (2000, 2001 and 2002), *On Christian Theology* (2000), *Ponder These Things: Praying with Icons of the Virgin* (2002), *Writing in the Dust* (2002), *The Dwelling of the Light: Praying with Icons of Christ* (2003), (with Jim Cotter, Martyn Percy, Sylvia Sands and W. H. Vanstone) *Darkness Yielding* (2004), *Anglican Identities* (2004), *Why Study the Past? The Quest for the Historical Church* (2005), *Grace and Necessity: Reflections on Art and Love* (2005), *Tokens of Trust: An Introduction to Christian Belief* (2007), and *Dostoevsky: Language, Faith and Fiction* (2008). His first two collections of poetry – *After Silent Centuries* (1994) and *Remembering Jerusalem* (2001) – were reissued with new material in 2002 as *The Poems of Rowan Williams*; and a further collection, *Headwaters*, was published in 2008.

PREFACE

This book came into being as a result of a symposium, ‘Spiritual Information: Knowing the Unknowable about God and the Universe’, held at Trinity College, Cambridge, in the spring of 2005. The meeting drew together a small group of scientists with scholars who study two major religious traditions, the Indian and the Christian. It was a ground-breaking occasion, in the sense that all the participants were highly trained and expert in their fields, whether in the study of religions or in the sciences – and the topic was of equal importance in science and in religion.

The topic may seem at first sight obscure, but in truth it lies at the heart of the human quest to take knowledge and insight, in different areas of life, beyond the boundaries of the known – even ‘to know the unknowable’. It is what scientists are doing when they undertake research. But it is also what religious people do when they explore the boundaries of their spiritual nature. The effort to ‘know the unknowable’ is a profoundly important way in which human beings make progress, as much in science as in religion. In this book we investigate what that means in practice, and what it reveals about the relationship between science and religion.

The John Templeton Foundation, under the aegis of its *Humble Approach Initiative*, sponsored the symposium that gave rise to this book. While the agenda was determined by the participants alone, the symposium took place in the context of the purpose of the Foundation to make progress in obtaining ‘new spiritual information’. It is hoped, according to R. L. Hermann (writing of Sir John Templeton’s vision) that this will be a progress to rival ‘the progress that has been made in obtaining medical and other scientific information’.¹

Central to this concern is the endeavour to understand what it is that makes humans transcend their points of evolutionary origin. We know how closely

we are related genetically to the higher primates, and yet our behaviours and our experiences transcend what is possible for them: what is it that takes us (to adapt a phrase) ‘one over the ape’? For example (and it is only one example, of course), can we begin to understand the spiritual progress involved in ‘the mind’s own occasional capacity for ecstatic self-transcendence’?²

What that example and the phrase ‘progress in spiritual information’ indicate is a programme of research into any of the many ways in which humans are ‘one over the ape’ in terms of their aptitudes, of their well-being and of their aspiration to transcend what Freud used to call ‘our abject points of departure’. Clearly, this includes the exploration made by humans, since the time of their origin, of what their bodies, brains and minds are capable of being and of becoming. In terms of ‘becoming’, it is not at all surprising that they developed the languages of ‘soul’ and ‘spirit’. This exploration, and the interpretations of it which they have shared with each other, I have called elsewhere ‘somatic exploration’ (*soma* being the Greek word for body) and ‘somatic exegesis’: they lie at the very heart of the whole human religious enterprise.³

So, although the emphasis of the Foundation is on novelty and on new research, particularly by science and scientists, the fact remains that many, if not most, of the data for this research are held in the lives of religious people and of religious communities, as much in the past as in the present. But to gain access to those data, scientists will need the help not only of those engaged in religious life but also of those whose work it is to know about and understand religions in a trained and professional way.

To some extent, therefore, this particular symposium was an experiment: can the Foundation advance its purpose by bringing together scientists with those who have comparable expertise in the understanding of religion and religions? The data to be studied must necessarily lie within the religious life and experience of humanity. And while we are not engaging in ‘religious studies’, or in the history of religions, we do need to establish very carefully indeed what exactly it is that humans have discovered as they have made the advances in spirituality that lie as evidence before us – and not just *what* they have discovered, but also *how* they have done it.

This background explains why a topic was chosen for this symposium that lies at the heart of both scientific and religious life – namely, what

do humans do when they are confronted not just by the unknown but by what seems to be unknowable? Is there something about us which finds the unknowable to be, at least in some circumstances and on some occasions, not a frustrating dead end but an invitation?

This is different from the unknown. At every moment of our lives we are dealing with the *unknown*. That is so not least because of our experience of time. Whatever time may be in itself (which could well be an example of the unknowable), we live in thermodynamic sequences that offer to us the experience of past, present and future – and even that rather obvious statement was called by Einstein ‘a stubbornly persistent illusion’.⁴

Maybe. But within the illusion we have a limited knowledge of the past, a fleeting experience of the present, and very little way of knowing what will happen in the future. From this arises so much that is characteristic of human life. For example, our morality and ethics arise in large part because we have to evaluate actions or events that lie in projected but largely unknown futures: is this wise or foolish? Is it right or wrong? Is it good or evil? Or again, as another example, scientific research is always pressing on the boundaries of what (up until this research is undertaken) is unknown.

Quite apart from ethics and research, we cope with the unknown every day of our lives: we do not know, for example, how much taxes will rise next year – indeed, economists have, notoriously, been defined as people who tell you tomorrow why what they said yesterday did not happen today.

The cultural consequences of the unknown are enormous: we do not know what the result of games will be; we do not know how books or films or songs or plays are going to end – or if we do, our involvement in them is important but entirely different (as, for example, when we see *Hamlet*, not just once but many times). We are, therefore, so accustomed to dealing with the unknown that we gain a perfectly proper confidence in regarding the unknowable as something with which we can engage. Certainly this often leads us into foolish attempts to know the unknowable, as, for example, when people try to know what will happen in the future (unknowable) by reading their horoscope in a daily newspaper. But equally, our experience in dealing with the unknown gives us confidence in confronting the apparently unknowable, and that is why it can lead us into the most profound exploration and discovery, as much in religion as

in science. Einstein used to recall what it was that led him into a life of exploration: it was when his father first showed him a compass. ‘Something’, he said, ‘deeply hidden had to be behind things.’⁵

So the purpose of this book is to show what the human engagement with the unknown and the unknowable actually is, and why it is of supreme importance in the development of scientific knowledge, and equally in spiritual growth and exploration.

We have given focus to what is a large topic by looking not at all, or even at many, of the religions of the world, but at Christianity and Indian religions. The book follows a general plan: a wider survey is followed by a more detailed example, and then (in the case of the religions) by the question of what this has meant in practice to one particular individual. Thus the book is far from being simply theoretical.

The order and connecting theme of the chapters is this: the Introduction illustrates with specific examples what the unknowable means in practice in science and religion, and why it has been so important. Chapter 1 sets the scene for the sciences by looking at the ways in which, in the particular science of ecology, the distinction between the unknown and the unknowable is by no means simple. John Rodwell shows how science makes progress by refusing to define in advance what is simply unknown (at the moment) and what is unknowable altogether. There is, in fact, a kind of sliding scale or spectrum, ranging from, at one end, that which happens to be unknown because the research has not yet been done, to, at the other end, that which seems to be completely unknowable. What belongs to each of these categories changes over time, and it belongs to the possibility of progress in science that scientists are deeply aware of why and how those changes occur.

What does this mean in practice? In Chapter 2 Ramanath Cowsik takes a particular example to show how, through the course of time, scientists have moved to and fro across that spectrum as they make progress in understanding a challenging problem. The example he takes is the issue of how the sun generates so much heat and energy. At first sight, the answer seems unknowable, since it is clearly not possible to go to the sun, rummage around inside and find what we are looking for. Cowsik shows

how scientists began to think how the answer might become known, only to be so defeated that the answer once again became unknowable, only for others later to see how the unknowable might become known.

From that account it might seem easy to jump to the conclusion that if scientists hang around long enough (in succeeding generations) the unknown will become known. It might then follow that, although there is much that at present we do not know, there is nothing in principle that is (in the end) unknowable – a position called in the philosophy of science ‘fallibilistic absolutism’. That assumption is extremely dangerous, argues Alexei Nesteruk (Chapter 3), because it leads to casual and un-rigorous science. His focus is on cosmology and on speculations about the origins of the cosmos.

Nesteruk also argues that a similar humility is required in theology, in reflection and argument on the nature of God. With that, philosophers would certainly agree – famously so in the case of Kant (1724–1804), with whom Keith Ward deals in Chapter 4. In the first of his three Critiques, *The Critique of Pure Reason* (1781), Kant considered some of the most searching questions concerning human knowledge, reason and understanding, in a way that has made it one of the most important works of modern philosophy – and that is why the issues raised by Kant are addressed in other chapters in this book.

Kant has been taken to be a powerful reinforcement of the view that God is unknowable, because, as Ward points out, he drew a distinction between human knowledge, which rests on sense experience, and understanding, which orders sense experience and gives it meaning. It follows that the human mind is tied to the world of ‘phenomena’, so that the ‘noumenal’ world of ‘things as they are in themselves’ is unknowable. There are, therefore, no arguments that can lead us to conclude that God exists, since claims to an experience of God, or to religious experience in general, do not belong to the phenomenal world. The *idea* of God may play an important part in regulating our lives – as, for example, the idea of a highest intelligence may inspire scientists to find order in phenomena, and a reason for their being intelligible. It would seem, therefore, that, for Kant, God is profoundly unknowable. Ward starts from this point and, by drawing in particular on Kant’s later works, shows why his position can be understood in far more subtle and important ways.

Of course the fact remains that God is necessarily unknowable in the sense that God is not an object in the universe waiting for us to go out, rummage around and find it. This necessary truth has been captured in what is known in Christianity as ‘the apophatic tradition’. The word ‘apophatic’ comes from the Greek *ἁποφατικός*, meaning ‘negative’, so that apophatic theology insists that we can only say ‘what God is not’, since all our words and concepts are completely inadequate to say ‘what God is’. In a taxonomy of absence (Rodwell above), God is clearly absent at an extreme end of any spectrum which insists that knowledge rests on immediate empirical observation, since God cannot be present as an object among other objects in this universe.

From this some have concluded that if God is permanently absent without leave, God is hardly worth bothering about. And yet the presence of God has consistently been found in the very nature of that absence, particularly by those who do ‘bother about God’ in their prayer, meditation and contemplation. In Chapter 5 Bernard McGinn sets the scene for the exploration of this paradox in Christian history by showing how this all-important understanding of negativity in relation to God takes on different forms, all of which have their part to play in spiritual growth and development – as much now, in the present, as at any time in the past.

Sarah Coakley, in Chapter 6, looks at one particular metaphor through which this unknowability of God has been expressed in the past, in Judaism as well as in Christianity. The metaphor is that of the veil and of the veiling of the face in the presence of God – a metaphor that was used dramatically by the writers of the Synoptic Gospels in their accounts of the crucifixion of Jesus.

Oliver Davies then shows in Chapter 7 how these considerations, derived from Kant and from the negativity implicit in the approach to God in prayer and worship, are integrated positively in the Christian understanding of God made knowable in creation and revelation. This way of knowing Davies compares with scientific knowing in order to show how the two can relate to each other.

Again we ask the question, what does this mean in practice? In Chapter 8 Margaret Bowker takes as an example one man, R. S. Thomas, who left a record in his poetry of what this life before God, on the edge of the

unknowable, feels like and involves. He was so unevasively honest that he has been called an atheist in disguise – one who really knows that God is not there, but who refuses to admit it. Margaret Bowker shows that this opinion is a disastrous failure to understand Thomas, and indeed to understand what prayer is.

The themes of the absence and unknowability of God appear also in Indian religions, where absence as a form of presence is equally important in spiritual growth and development. But they take on very different forms, and they are applied in different ways. Gavin Flood (Chapter 9) offers a general account of this, and then gives some particular examples from the approach to God through the devotion to God as Shiva.

India is also important because of the way in which the unknowability of God was driven to a radical conclusion: God is unknowable because God is not there (here or anywhere) to be known. This is the conclusion reached by Jains and Buddhists. Of course there are many gods in Buddhism, but they are a part of the long process through which all appearances, including those of the gods, seek to find release from reappearance and attain enlightenment. What Jains and Buddhists regard as unknowable (because non-existent) is God understood as the Creator of everything, the unproduced Producer of all that is, who is independent of this or any other universe. Paul Williams (Chapter 10), however, shows that this does not stop Buddhists exploring, on the edges of the unknowable, the nature of those agents who sustain the process of the universe in particular ways. He takes as a specific example the Tibetan devotion to Samantabhadra to show how comparable issues of unknowability drive the Tibetan quest for spiritual growth and advance.

Again, we ask the question, what does this mean in practice? Francis Clooney takes the example of the extraordinary poetry of South India, where the absence and apparent unknowability of God evoke a specific kind of devotion – *viraha bhakti*, the devotion of longing in the absence of the loved one (Chapter 11). Looking at one poet (Satakopan) and at one poem in particular, Clooney shows how fundamental – and one might almost say necessary – the absence of God is for progress and growth in Indian spirituality

Clooney ends by reflecting on the implications of this for under-

standing two different traditions of spirituality, the Indian and the Christian. This book strongly reinforces his glimpse of a common human spirit seeking to live in the presence of God even (or perhaps especially) in the absence of God. This is powerfully illustrated by the close connections between the chapters on Satakopan and Thomas.

Rowan Williams, who had hoped to take part in the original symposium but was prevented from doing so by unexpected public events, has contributed an Afterword, drawing together important themes in the volume as a whole. He reinforces the sense of a common human spirit belonging both to religion and to the world of scientific enquiry and research. Certainly it is expressed in vastly different ways; yet it bears witness to a fundamental condition of being human: the unknowable, just as much as the unknown, is not defeat. It is invitation. To respond to that invitation requires humility about ourselves, and it requires also the integrity and the uncompromising honesty of a Thomas and a Satakopan, a Kelvin and a Bohr. To that extent, the scientific and the religious response to the unknowable in the case of the universe and of God reveals what it is to be truly and admirably human in a world that we share.

Notes

- 1 R. L. Hermann, *Sir John Templeton: Supporting Scientific Research for Spiritual Discoveries*, revised edition (Philadelphia: Templeton Foundation Press, 2004), p. 182.
- 2 This phrase was used by Sarah Coakley in her original paper.
- 3 See J. Bowker, *Is God a Virus? Genes, Culture and Religion* (London: SPCK, 1995), pp. 151–67; ‘Religion’, in J. Bowker, ed., *The Oxford Dictionary of World Religions* (Oxford: Oxford University Press, 1999), pp. xviif.
- 4 Einstein wrote in a letter in 1955 about the death of a friend: ‘Now he has departed from this strange world a little ahead of me. That means nothing. People like us, who believe in physics, know that the distinction between past, present and future is only a stubbornly persistent illusion.’ See P. Speziali, ed., *Correspondance, 1903–1955* (Paris: Hermann, 1972), p. 538.
- 5 ‘Autobiographical Notes’, in P. A. Schlipp, ed., *Albert Einstein: Philosopher-Scientist* (LaSalle, IL: Open Court, 1949), p. 9.

INTRODUCTION

The Unknowable as Invitation in Science and Religion

John Bowker

The purpose of this book is to examine the part played in both science and religion by the quest to know the unknowable in the case of God and of the universe. At first sight it may seem to be a spectacularly pointless waste of time, since if something is truly unknowable, there is nothing to be gained by trying to know it. That reaction, however, is far too simplistic: there may be a great deal to be gained, as the chapters in this book show.

It is true, of course, that some things are logically and (as John Rodwell puts it in Chapter 1) necessarily unknowable because they are not available to be known. Four sided triangles and fairies at the bottom of the garden are unknowable because they are not available to be known:

As I was going up the stair
I met a man who wasn't there.
He wasn't there again today.
I wish, I wish he'd stay away.¹

There are those who believe that God is in this category, and who insist that the unknowability of God arises simply because 'God' was never there in the first place. Such people would seem to be straightforward atheists. Among Indian religions, both Jains and Buddhists reached the conclusion that the kind of God described and worshipped in the

mainstream Indian traditions (what we may call anachronistically, but for the sake of convenience, Hinduism) was never there in the first place.² The consequence of that in Buddhism is reviewed in this book by Paul Williams (Chapter 10).

Less drastically, classical Samkhya allowed a comparable conclusion, because, while it accepted the authority of the Veda and did not construct arguments to demonstrate the non-existence of God, it did claim that there is no reason to postulate the hypothesis of God as creator: *prakriti* and *purusha*³ are sufficient to explain the entire universe and all events within it.

This strong sense of unknowability may seem unlikely in the sciences, because it is hard to see how in those circumstances experimental science could even begin. But in detail scientists have spent much time involved in unknowability in this strong sense (i.e., in trying to know that which was never there in the first place). Spissitude, phlogiston, caloric, morbid miasma, N-rays and the aether are standard examples.

But even at this extreme end of a spectrum of reasons for unknowability, the struggle to know the unknowable has not proved pointless. In the case of science, for example, it has demonstrated either that the claimed phenomenon does not exist (as in the case of aether and N-rays), or that the claimed phenomenon is a corrigible, and now corrected, way to account for what presents itself evidentially. The attempt to know the unknowable has thus proved immensely creative in the advance of understanding and knowledge. For example, James Clerk Maxwell (1831–79) originally thought that the flow of electric current and the transmission of magnetic effects depended on the aether rotating to form vortices, and his classical theory of electromagnetism depended on mechanical models of the aether. Nevertheless, his paper of 1865, ‘A Dynamical Theory of the Electromagnetic Field’, makes no mention of the rotations and vortices, and simply presents the famous equations which synthesise basic laws in the separate fields of electricity and magnetism – Coulomb’s law and the Biot-Savart law respectively. The aether and the vortices were unknowable because they were not there to be known, but the struggle to know the unknowable nevertheless proved to be extremely fruitful (on this example, see further p. 9).

Even among those who claim that God is unknowable because God was never there in the first place, the outcome has not always been a straightforward atheism. For example, the much-proclaimed ‘death of God’ during the second half of the twentieth century was not understood as the death of a previously living entity who no longer exists, but as the revelation, according to Mark Taylor’s ‘Postmodern A-Theology’, that ‘God’ was a subjective projection, the creation of human beings: ‘This revolutionary reversal both called into question the actuality of the divine and rendered doubtful all forms of religious authority.’⁴ ‘God’ as traditionally understood had never been there in the first place. However, Taylor sees himself not as having left ‘the Christian story’ but as still belonging to those ‘marginal people’ through whom the next, and very different, stages of that story will be told.

From this it becomes clear that claims to unknowability in the strong sense may turn out to be simply a recognition that existing characterisations, whether of God or of some aspect of the universe, are false. The Jain and Buddhist rejections of God might be neutralised by accepting their critiques, but by saying that God *as characterised* in those critiques is indeed ‘not like that’. ‘God’ would certainly be unknowable in the sense that there is nothing that corresponds to those defective characterisations.

This will seem fairly trivial at the level of ‘God as an old man with a beard’ or of the universe as a finite space in which the earth is central. However, there is a far more serious implication to this, both in religion and in science. To say that God is not like an old man in a correspondence sense of reference has led all theistic religions inexorably into the realisation that God is not ‘like anything’, and is beyond description, because God is not an object in the universe like other objects, open to observation and description.

It was this that led, in Christianity, to apophatic theology (defined on p. xviii) and the *via negativa*, and this vital theme is explored by Bernard McGinn, in Chapter 5. The *via negativa* was no doubt ameliorated by the *via eminentiae*,⁵ but even so it led Eckhart to suggest that the Trinity itself is a preliminary language that does not *correspond* to ‘the barren Godhead’,⁶ ‘what God really is’. The interplay between what can and cannot be said is teased out by Oliver Davies in Chapter 7.

It is striking that although Davies is writing about these themes in the Christian tradition, everything that he says applies equally to Indian religions, with very little alteration needed beyond the change of proper names and the replacement of ‘incarnation’ by *avatara* (manifestation of God). As Gavin Flood points out in Chapter 9, the Indian traditions are less inhibited about the emotional experiencing of God, and about representations of the divine that will lead worshippers in the direction of God. Images abound in Hindu temples, and there is a real presence of God in and through the images – as indeed there can be in and through the universe and objects in the universe. Nevertheless, there is wide acceptance that the signpost is not the thing signified. Brahman (the ultimately Real) has significant attributes (saguna Brahman), especially for those for whom the universe is the body of Brahman, but even so nirguna Brahman (Brahman beyond attributes) is more fundamental, and can only be approached in words by saying ‘*neti, neti*’, ‘not this, not this’ (or, ‘No! No!’: see p. 189).

The negative way may seem remote from the sciences since it is surely their task to state what is the case, rather than what is not. And yet, as Ramanath Cowsik points out (p. 54), it was the achievement of Karl Popper to remind scientists of the importance of their own version of a *via negativa*: to attempt to falsify a theory or a hypothesis is to strengthen, not weaken, its power; and Ramanath Cowsik exemplifies in his chapter (Chapter 2) exactly how this works in practice. The scientific objection to theories like that of Freud (to take just one example) is not that they are incapable of telling important stories that may help people to understand and re-form their lives, since clearly for some people they do exactly that. It was rather that they are incapable of being falsified. A more recent example is that of the widely popular theory of units of cultural replication known as memes: it is an interesting story but incapable, in its present state, of being a serious scientific theory, because it cannot be falsified. Memes turn out to be a reification of ignorance.⁷

Falsification has become so basic to the process of science that some version of critical realism has come to seem not just attractive but inevitable. No scientist can tell us, in any final or complete way, ‘what the universe is’. The universe is always unknowable by way of defective or incomplete

characterisation, so that whatever is said about the universe, or some aspect of the universe, is likely to be approximate, provisional, corrigible and incomplete, not least from the point of view of later generations. On the other hand, there is sufficiently what there is in the case of the universe for corrections to take place. On this basis science may be incomplete and corrigible, but it achieves immense reliability. The universe is unknowable in any incorrigible sense, and yet is known.

The point of interest is why and how, in a comparable way, our accounts of God are always corrigible and yet also achieve reliability. Clearly, no one can tell us, in any complete or final way, 'what God is'. So our language about God (even when it appeals to revelation) is bound to be approximate, provisional, corrigible and incomplete. Yet there is sufficiently what there is in the case of God for corrections to take place and for great reliability to be established. How do we know this? The answer to that has to be practical. It can be found only in the forms through which the exploration of relationship with God is brought into being, in response to what seems to be initiative *from* God, in such things as prayer, worship, contemplation, meditation, and in their consequences in the ways in which people live in the world and with each other. What that means *in practice* for particular people is the focus of the chapters by Margaret Bowker (Chapter 8) and Francis Clooney (Chapter 11). In both cases, the people chosen for study are those who accept with rigorous honesty the serious sense in which God is unknowable and yet is known.

The claim that, in both science and religion, the unknowable nevertheless is known, does not lead to the conclusion that everything eventually *will* be known if we keep chipping away long enough at the mountain of unknowability. It is the point of Alexei Nesteruk's chapter (Chapter 3) that some parts of the mountain (so to speak) are inaccessible to human enquiry. He takes as an example the origins of the cosmos, protesting against the ways in which abductive inference (essential though that is in all science, as I have shown in *The Sacred Neuron*) slides into an illegitimate assumption that this is the same as empirical observation.

Keith Ward (in Chapter 4) picks up the point that there are 'limits to knowledge at the bounds of sense'. But that principle of the philosopher Kant does not mean that all things beyond the bounds of sense are

completely unknowable. It is simply that they will have to be known in ways different from a crude empiricism which supposes that all we need to do in order to know anything is (as Bernard Lonergan used to put it) 'to go outside and take a look'.

From all this it follows that the unknowable, or what is claimed to be unknowable, does not have to be a dead-end. It can be an invitation. It is an invitation to come further and deeper, in the one case into God, and in the other into the universe.

In the case of Christianity and the Indian traditions, the invitation may come from One who deliberately withdraws the sense of his being present. It comes to those who have no doubt that they have genuinely and authentically known God. But now God seems to have withdrawn deliberately from that earlier sense of presence – to have withdrawn, in other words, into unknowability. The classic example of this in Christianity is the account by John of the Cross of 'the dark night of the soul'. In India, in addition to the examples given by Gavin Flood in Chapter 9, an equally well-known example is the recognition that Krishna (an *avatara*, or manifestation in human form of God characterised as Vishnu) deliberately withdraws the well-known sense of his presence and becomes unknowable. The many stories told about Krishna include episodes of his deliberate withdrawal from those devoted to him.⁸ The response to the unknowability of God in this sense appears forcefully in what is known as *viraha-bhakti*, loving devotion even in the absence of God, and it is this which is expressed so yearningly in the South Indian poets known as the Alvars, whom Clooney considers in his chapter (Chapter 11). It is precisely because they do not (and indeed cannot) doubt the reality of God and of all they have previously known of God, that their poems of *viraha-bhakti* are so moving.⁹

In the sciences, this kind of unknowability cannot occur as though the universe takes a personal initiative to withdraw, but it certainly does occur in the sense of 'unknowability as invitation'. As with God, so here: it is not as though people suddenly cease to believe in the universe altogether. On the contrary, the universe is still clearly there, but the truth about itself seems to be hiding at a much deeper level. There are differences and yet also similarities. This can be seen if we look in more detail at two examples of the ways in which, in science and religion, a response to

unknowability is made. The first example is the struggle of scientists to understand gravitation, the second is the work of human imagination in the architecture of the approach to God.

Gravity

Before the time of Newton, the nature and effects of gravitation could be observed, but the connection between these observations was unknown, and was believed by some to be unknowable. Lying hidden behind disparate and apparently disconnected phenomena (such as Kepler's three laws of planetary motion, and Galileo's laws of motion for bodies on the earth) Newton discerned 'the universality of gravitation'.

However, 'the unknowable' in this case was not something simple, hiding behind a chair (as in a child's game of hide-and-seek), waiting to be found. It was a deeper and far more profound way of understanding the relationship between those phenomena. As Cushing has put it, 'Newton was able to take this melange of fragmented facts and partial truths and ferret out a unified set of laws that correctly explained the motion of both heavenly and terrestrial bodies.'¹⁰

But this by no means made the nature of gravity obvious. Even when he had 'explained the phenomena of the heavens and of our sea by the power of gravity', the nature of gravity still remained unknown and perhaps unknowable; and if it remained as continuing invitation to others, it did not do so to Newton. In the often-quoted passage from his *Mathematical Principles of Natural Philosophy*, he makes it clear that for him it is enough that the phenomena are explained:

Hitherto we have explained the phenomena of the heavens and of our sea by the power of gravity, but have not yet assigned the cause of this power. This is certain, that it must proceed from a cause that penetrates to the very centres of the sun and planets, without suffering the least diminution of its force; that operates not according to the quantity of the surfaces of the particles upon which it acts (as mechanical causes used to do), but according to the quantity of the solid matter which they contain, and propagates its

virtue on all sides to immense distances, decreasing always as the inverse square of the distances. Gravitation towards the sun is made up out of the gravitations towards the several particles of which the body of the sun is composed; and in receding from the sun decreases accurately as the inverse square of the distances as far as the orbit of Saturn, as evidently appears from the quiescence of the aphelion of the planets; nay, and even to the remotest aphelion of the comets, if those aphelions are also quiescent. But hitherto I have not been able to discover the cause of those properties from phenomena, and I frame no hypotheses; for whatever is not deduced from the phenomena is to be called an hypothesis; and hypotheses, whether metaphysical or physical, whether of occult qualities or mechanical, have no place in experimental philosophy. In this philosophy particular propositions are inferred from the phenomena, and afterwards rendered general by induction. Thus it was that the impenetrability, the mobility, and the impulsive force of bodies, and the laws of motion and of gravitation, were discovered. And to us it is enough that gravity does really exist, and act according to the laws which we have explained, and abundantly serves to account for all the motions of celestial bodies, and of our sea.

(Isaac Newton, *Mathematical Principles of Natural Philosophy III*, General Scholium, trans. A. Motte and F. Cajori, Encyclopaedia Britannica Great Books (Chicago: 1990), pp. 371f.)

The reason why that passage is so often quoted is because it gives the authority of Newton to the primacy of induction over deduction from unfounded hypotheses. But d'Alembert, one of the leading French advocates of Newton, saw very clearly that an inductive approach alone will always leave much 'behind the veil', and completely unknowable – far beyond the scope of existing human knowledge: must it, and will it, always be so? Will that which is 'behind the veil' (or behind what Lord Kelvin called 'clouds': see further p. 11) always remain so, or is it a continuing invitation?

Newton, in d'Alembert's view, could not play the part of God, and therefore he could see nature 'only through a veil which hides the workings of its more delicate parts from our view . . . Doomed . . . to be ignorant of the essence and inner contexture of bodies, the only resource remaining for our sagacity is to try at least to grasp the analogy of

phenomena, and to reduce them to a small number of primitive and fundamental facts. Thus Newton, without assigning the cause of universal gravitation, nevertheless demonstrated that the system of the world is uniquely grounded on the laws of this gravitation.¹¹

D'Alembert believed that 'the most abstract notions, those that ordinary men regard as most inaccessible, are often those that shed the brightest light.' This is the unknowable inviting us on in a much deeper sense than that of 'solving the next problem'. The successors of Newton realised that neither he nor they understood how one physical body could affect another at such distances with no apparent contact between them – how, in other words, there could be *actio in distans*, 'action at a distance'. Following the famous maxim of Hobbes (*causa motus nulla esse potest in corpore nisi contiguo et moto*), they came to the conclusion that there must be some intervening medium through which the direct physical influence is communicated from the one to the other, and for that reason they postulated the existence of the aether.

Thus Maxwell (see p. 2), who unified the phenomena of electricity and magnetism, and identified the electromagnetic nature of light, recognised the importance of Faraday's fields and lines of force, but because he was still seeking what he called '*vis a tergo* – a shove from behind', he argued originally for the physical reality of the aether as the medium through which that 'shove' could be given.¹² He could then explain the effect of an electric current on a magnetic needle by understanding the magnetic field as being occupied by innumerable vortices created by rotations in the aether, their axes coinciding with the direction of the magnetic force at every point of the field. Tied as he was to a mechanistic understanding of the universe, he had no option but to find some medium through which the principles of classical mechanics could work the observable effects.

'Had no option but . . .': however, is that really so? That is the question of this book. Facing the apparently unknowable (how to account for electromagnetic effects? how to account for the nature of gravity?), a divide opened up. On the one hand, some (the majority) in effect gave up: given the domain assumption of a mechanistic universe, and given also the unacceptability of action at a distance, it seemed to them that there must be

some direct physical link between distant interacting bodies. If that link appeared to be hidden, it could only be because the intermediate medium through which agency could be effected is made up of particles too subtle to be detected. Hence they ‘invented’ the aether. After all, Newton himself had observed, ‘That one body may act upon another at a distance through a vacuum, without the mediation of anything else . . . is to me so great an absurdity that I believe that no man, who has in philosophical matters a competent faculty for thinking, can ever fall into it.’

On the other hand, there were those who persisted with the hidden and what to the majority was unknowable. Among them, Michelson is particularly well known because of his experiment in 1881, repeated later with Morley (hence ‘the Michelson–Morley experiment’). If the aether existed, then the velocity of a disturbance measured by an observer at rest in the aether would have a privileged value, because it would relate to the motionless aether, as opposed to two observers moving at different velocities with respect to the aether. It would thus be the same as the true velocity of light. The light-bearing (luminiferous) aether exemplified Newtonian absolute space, so that if its existence could be verified, it would offer a way of distinguishing absolute motions from relative motions. Michelson’s experiment showed that the hypothetical aether did not have any of the effects that it should have had (if the aether existed) on the velocity of electromagnetic waves.

Although this was the end of the hypothesis of an interplanetary medium, possessing dynamic and kinetic properties like those of ordinary bodies, it did not stop at least some from trying to rescue the aether – the FitzGerald contraction, for example, or the claim that the aether must be dragged along by the bodies moving through it.

Others persisted with the apparently unknowable, not least Einstein, who recognised the impossibility of putting together Newton’s laws of motion, Maxwell’s equations and the classical concepts of spacetime. When, as he put it later, ‘the Special Theory of Relativity began to germinate in me, I was thrown into all sorts of nervous conflicts. When young, I used to go away for weeks in a state of confusion.’¹³

This is persistence, which can be costly, in responding to the unknowable as invitation. And yet, when the solution came, it arrived in a sudden

moment when, as he recalled, he was sitting in his chair at the Patent Office in Bern, and the thought occurred to him, 'If a person falls freely he will not feel his own weight.' It was this single thought which impelled him towards the theory of gravitation. Combining the geometry of curved spaces and his own discovery of the unity of spacetime, he identified gravity, not with the curvature of space, as Helmholtz and others had speculated, but with the curvature of spacetime.

Although it is now known much more clearly 'what gravity is', post-Einstein, the 'invitation' has continued. In 1977, for example, Bertotti (in the – for this book – aptly named *Encyclopaedia of Ignorance*¹⁴) listed three new 'riddles of gravitation': the riddle of geometrical simplicity (is the spacetime continuum simply an *arena* for particles or fields, or are matter, charge, electromagnetism and other fields simply manifestations of the bending of space, so that physics is geometry?); the riddle of proper time (whereas Newton assumed that gravity is transmitted instantaneously in absolute time, for Einstein nothing can be transmitted faster than light, so that absolute time becomes what Mach called 'an idle metaphysical conception'; so how can proper time, used to define the invariant separation between two events, be treated as an absolute?); and the riddle of inertia.

By 2001, John Taylor (in the equally aptly named *Hidden Unity in Nature's Laws*¹⁵) was able to show how the hidden in the case of gravity still continues to act as invitation. For example, in what he calls 'the crack in gravity's armour', he points out important moments in the history of physics when progress has been made by 'probing the interface between two subjects that sit uneasily together'. Thus Einstein himself was led towards the special theory of relativity by seeking to reconcile Newtonian dynamics with electromagnetism; and Planck initiated quantum theory by combining statistical physics with electromagnetism (these were the 'two clouds' specified by Lord Kelvin in his famous lecture in 1900, which made a Newtonian account of the universe impossible¹⁶). A comparable moment came in 1974 when Stephen Hawking 'put his finger on a crucial juncture between quantum theory and Einstein's theory of gravity, two theories that had hitherto seemed disjoint'. Taylor commented:

The implications of Hawking's insight [roughly, that black holes are not black, but glow in a definite and simple way, hence Hawking radiation] are by no means worked out, but surely it will be one of the keys to a future theory in which gravity is reconciled with quantum theory and with the other forces of nature.¹⁷

Gravity exemplifies in science the importance of persistence in knowing the unknowable. In our time, others include the self and consciousness; hidden universes; fallibilistic absolutism in theoretical physics; string theory and the possibility that it is only a coherent construction – if that.¹⁸

All these show clearly not only how the unknowable acts as invitation but also how the unknowable and the unknown interchange with each other: that which seems unknowable may turn out to have been merely unknown; further research or reflection makes it known. But, conversely, that which seems simply to be unknown and just needing a bit more work to turn it into the known, may in fact turn out to be strictly unknowable. It is the possibility of this constant interchange that emerges so clearly in John Rodwell's chapter (Chapter 1). It means that on the middle ground of the spectrum, the *discernment* of the distinction between the unknowable and the unknown is not guaranteed by external or objective criteria. It is a constant issue – and invitation. After all, Einstein himself had continuing doubts about the way in which quantum theory was developing. At the Fifth Solvay conference in 1927, Einstein expressed his doubts (it was at this conference that he asked his famous question 'whether God plays dice'), whereas Bohr persisted, while Pauli and Heisenberg paid little attention. According to Otto Stern's recollection:

Einstein came down to breakfast and expressed his misgivings about the new quantum theory, every time [he] had invented some beautiful experiment from which one saw that [the theory] did not work. . . . Pauli and Heisenberg, who were there, did not pay much attention, 'ach was, das stimmt schon, das stimmt schon'. Bohr, on the other hand, reflected on it with care and in the evening, at dinner, we were all together and he cleared up the matter in detail.¹⁹

The issue here was whether there can be a causal description of microphenomena as there should be in classical physics. For Pauli and Heisenberg, this was simply unknowable in the strong sense (see Bell's comment below), because there are no trajectories of particles which exist and are available for observation. For that reason, it is not possible to give a deterministic description of fundamental physical phenomena, so that, in the laws governing those phenomena, there must be an essential indeterminism or probability (which is not like the probability in classical physics, where it was simply a reflection of what we happen at any time not to know). Thus a causal description of such microphenomena is simply unknowable.

On the other hand (and as an example of persistence in knowing the unknowable), it actually *is* possible to write a logically consistent causal interpretation of quantum mechanics, in which a microentity (like an electron in a double-slit experiment) follows a trajectory through one of the slits from the source to the screen in a specific and definite way. That is exactly what David Bohm did in 1952, when he took the Schrödinger equation and rewrote it, by means of a mathematical transformation, in a form similar to Newton's second law of motion. According to this interpretation, the wave acts as a guide or pilot, and it exerts an influence on the particle. The wave then goes through both slits, but the particle passes only through one. Thus the wave function represents the causative effect of the environment on the microsystem involved, and that is why this interpretation is called 'the causal interpretation'.

In relation to the theme of this book, the important point is that a decision between the two interpretations does not and cannot depend on the discovery of further data, since they are both based on the same formalism and, if certain assumptions are made for both, they are indistinguishable in their predictions. The practical issue here was brilliantly summarised by John Bell:

Bohm showed explicitly how parameters could indeed be introduced, into nonrelativistic wave mechanics, with the help of which the indeterministic description could be transformed into a deterministic one. More importantly, in my opinion, the subjectivity of the orthodox version, the necessary

reference to the ‘observer’, could be eliminated. Moreover, the essential idea was one that had been advanced already by de Broglie in 1927, in his ‘pilot-wave’ picture. But why then had Born not told me of this ‘pilot wave’? If only to point out what was wrong with it? Why did von Neumann not consider it? More extraordinarily, why did people go on producing ‘impossibility’ proofs, after 1952, and as recently as 1978? When even Pauli, Rosenfeld, and Heisenberg, could produce no more devastating criticism of Bohm’s version than to brand it as ‘metaphysical’ and ‘ideological’? Why is the pilot wave picture ignored in the textbooks? Should it not be taught, not as the only way, but as an antidote to the prevailing complacency? To show that vagueness, subjectivity, and indeterminism, are not forced on us by experimental facts, but by deliberate theoretical choice?²⁰

The importance of this in illustrating persistence in ‘knowing the unknowable’ is that Bell went on from this to produce his famous theorem which showed that the hope of finding hidden variables in order to bring quantum mechanics into the general framework of classical physics could not be realised.

Darkness and light: the architecture of unknowability

If we hope to make progress in understanding human spirituality, it is vital to remember how many different kinds of response there have been to the unknowability of God and of the universe, understood as invitation. They go far beyond science, theology and philosophy, and we have tried to show this (in Chapters 8 and 11) by choosing the example of poetry. Even four-sided triangles and fairies at the bottom of the garden (p. 1) have become ‘knowable’ in poetry.

Poetry, however, is not alone. Many other forms of human imagination (expressed in music, for example, or in art, mythology, novels, dance, architecture) are equally important in the human attempt to ‘know the unknowable’ in the case of God and the universe. The explorations of spirituality are less often expressed in the form of propositions, because artists of all kinds have their own more fruitful ways of working on the

boundaries of the unknowable, of that which lies hidden and inviting behind the obvious. As the poet Henry Vaughan (1622–95) put it succinctly, ‘The skin and shell of things, though fair, are not thy soul’s desire.’

Although, therefore, we have tried in this book to show how this happens in the case of poetry, we could have illustrated this in any of the arts. In painting, we could have taken icons as an example, or virtually the entire history of twentieth-century art in the West, epitomised in the famous ‘manifesto’ of Giorgio de Chirico, ‘Mystery and Creation’ (1913), which remains a remarkable statement of the involvement of artists in knowing the unknowable: ‘To become truly immortal a work of art must escape all human limits: logic and common sense will only interfere It is most important that we should rid art of all that it has contained of *recognisable material* to date, all familiar subject matter, all traditional ideas, all popular symbols must be banished forthwith.’²¹ de Chirico founded a school of art known as the *Metaphysical school* [*italics mine*] and was admired by the Surrealists, who found in him ‘a painter who shared their preoccupation with mystery, the unknown, the unconscious and the dream’.²² In India, painters are committed to ‘knowing the unknowable’ by the fundamental text on painting, *Viṣṇudharmottara* (a supplement to *Viṣṇupurāṇa*):

Vajra said – The Supreme Deity has been described as devoid of form, smell and emotion, and destitute of sound and touch – so how this form can be made of Him?

Markandeya replied – Prakṛti and Vikṛti [come into existence] through the [variation in] the form of the Supreme Soul. That form of Him [which is] scarcely to be perceived is called Prakṛti. The whole universe should be known as the Vikṛti [i.e., modification] of Him, when endowed with form. Worship and meditation [of the Supreme Being] are possible [only when He is] endowed with form The best position of the [Supreme] Soul [however] is to be imagined without form.²³

We could equally have looked at sculpture. Sculptors releasing form from stone are often seeking to know the unknowable through their work. Rodin, for example, believed that his task was not to rival photography by creating a surface resemblance, but to seek to know the unknowable

in the underlying *character* of those whom he was attempting to carve in stone.²⁴ In India, temple walls become chariots (bearers) of the reality of God in the form of innumerable carved images: for the pilgrim or the worshipper who approaches the temple, the images are not 'all that God is', but the bearers of God's life (*jiva*), so that through them the unknowable can begin to be known.

Even more to the point, in the human attempt to know the unknowable in the case of God, is architecture itself. In India, the architectural geography of temples is designed to lead the worshipper deliberately from the familiar and everyday world to the unknowability of God, who nevertheless can begin to be known. In contrast to the familiar prayer from the Upanishads, 'Lead me from darkness to light,'²⁵ temple architecture leads literally from light to darkness.

For those not familiar with Indian temples, it may be helpful to quote at length Stephen Huyler's description of this literal movement towards God, in his account of two typical worshippers, Vivek and Manika, as they seek a successful birth of a first child. They move from the outside world, through the stages of the temple architecture, into the darkness of *garbhagrha*, 'the womb chamber'. After buying their offerings at the temple gate, and leaving their sandals outside, 'they pass through massive doors under a towering stone structure filled with niches containing sculptures of the Gods and mythological creatures':

They immediately notice a change in atmosphere. It is not quiet here, but the intensity of noise is different. There are no vehicles, no market stalls, just throngs of people going in different directions and involved in many activities. They join the mass of people moving to the left in a wide walled passageway that encircles the central temple. As they walk, they compose their minds to focus on the reason that they are here: to pray for pregnancy and a successful childbirth. Their attention is diverted by the many rooms built into the enormous stone wall at their left. Some contain the sculpted carts and animal-shaped litters for carrying the processional images of the deities; others hold offices for the temple administrators; some are the kitchens for cooking the food offered to the Gods; and still others are stalls for the temple elephant and for the cows that provide milk for the pujas . . .

As they turn a corner they come upon an ancient tree, its branches tied with bundles of cloth offerings and prayers written on bits of paper in a tiny flowing script. Beneath it are stone sculptures of cobras, some with human bodies: the Nagas, ancient Gods of healing and fertility. Manika opens a small tin she has been carrying in her purse and smears sandalwood paste on the sculptures, praying as she does so for the health of their firstborn child.

Finally, after walking almost a quarter-mile around the enclosure, Vivek and Manika return to their starting point and enter a second gate. Inside, although still crowded, the atmosphere is more intense, focused on prayer. Again they turn left along a corridor that encircles the central temple. They are progressively drawing closer, ritually preparing themselves for their encounter with the great God. The edge of this passageway is arrayed with a series of small shrines, some with images of Shiva,²⁶ many dedicated to Gods and Goddesses secondary to his worship, and others to Shiva's saints. Although the young couple are intent on their goal of puja to the central image of Shiva, they still stop to acknowledge each shrine as they pass, folding their hands in respect and touching them to their foreheads.

At last they enter the third and final gate. Directly in front of them is a huge plinth, on which sits a gigantic granite sculpture of the bull Nandi, the beloved mount of the Lord Shiva. He faces away from them and directly toward the open door of the main temple. This interior building is a large edifice, its exterior walls inlaid with numerous niches, each holding an image of a God or Goddess, crowned by an elaborate tower rising in sculpted tiers to resemble the peak of a fantastic mountain. Vivek and Manika are overcome with awe. As they walk around this building, they, like the rest of the crowd, are quiet, concentrating on their prayers. When the newlyweds return to Nandi's shrine they begin to climb the steps into the temple's entrance hall. Inside it is cool, the light filtered from windows on each side. Both the pillars and the ceiling they support are elaborately carved with images of Shiva, his wife, Parvati, and their sons, Ganesha and Kartikeya, along with many other Gods, demigods, and mythical beings. Ahead of them is the sanctum sanctorum, the heart and soul of the entire temple complex.²⁷

This 'holy of holies' is the *garbhagrha*, which Huyler goes on to describe:

It holds within its dark and unadorned recesses the potency of the central image, the Absolute Power of the God or Goddess. No one but qualified priests is allowed to enter here – to do so might adulterate the purity of the power. Even the priests must undergo rituals of purification each time they wish to enter this ‘womb’. All other devotees approach as close to the image as possible for darshan with the deity. In some temples they are allowed to touch the base of the image or the feet of the Divine, believing that by doing so they absorb the God’s radiance through their fingertips. Non-Hindus are not permitted to enter the innermost areas of many of the most important temples, as it is feared that by inappropriate thoughts or gestures they might desecrate the image. Some temples, such as the Jagannath Temple in Puri, are considered so pure that no non-Hindus may enter the compound at all.²⁸

In Hindu temples, inert matter (*prakerti*, such as stone or wood) has been imbued through ritual with the life of God or Goddess (*jiva*), which in turn fills the temple with the power and reality of that which endures when all else has passed away (*purusha*). Temples are laid out and constructed according to careful rituals and rules, so that the whole building becomes a coded way through which people can begin to know the unknowable.

A counterpart in the Christian tradition would be that part of the nineteenth-century Gothic revival which saw church architecture as a code: properly deciphered, it points beyond itself to God, and it increases the sense of awe and mystery in the presence of God beyond human understanding. As Coleridge observed in his *Tabletalk*, ‘The principle of Gothic architecture is infinity made imaginable.’

In the Gothic revival, the use of architecture as a coded language is associated particularly with the architect Pugin, who believed that a building should be ‘illustrative of its purpose’. As Brooks has put it,

Structure was the basis of architectural semantics, but was not itself enough. ‘The smallest detail should *have a meaning or serve a purpose*.’ . . . A pinnacle, to take one example, is both ‘mystical and natural’, its verticality making it ‘an emblem of the Resurrection’, while it is simultaneously ‘an upper weathering to throw off the rain’.²⁹

Of course superficially this is not an exploration of the unknowable in the case of God. The building as a whole is indeed to be a code, but one that people with educated understanding can read. That, however, is simply ‘the skin and shell of things’ – fair, certainly, but not an end in itself. The code points far beyond itself to the unknowable God, whose glory can be dimly discerned *through* the beauty and the integrity of the building, but certainly not fully comprehended within it. To quote Brooks again, ‘The ecclesiologists were driven by a hunger for meaning [i.e., the attempt to know the unknowable], and in Gothic found a way of filling the built world with significance – with the Glory of God indeed.’³⁰

That was certainly true of the members of the Camden Society who, in 1843 (to use the words of Kenneth Clark) ‘struck a great blow for ecclesiology’. Clark went on:

Two of its founders, Mr. Neale and Mr. Webb, published a translation of Durandus, the chief expounder of medieval symbolism, to which they added an introduction on the place of ecclesiology in architecture. They set out to prove that correct symbolism – they preferred the obscure but solemn word sacramentality – was essential to Christian architecture³¹

Although Kenneth Clark assumed that the word ‘sacramentality’ was ‘an obscure but solemn word’ meaning the same thing as ‘symbolism’, it was nothing of the kind. Neale and Webb were using it in the sense of Jeremy Taylor (and many others) to mean ‘that which creates and constitutes the reality of that to which it points’ – hence Jeremy Taylor, defending a doctrine of the real presence while rejecting transubstantiation, insisted on the importance of the elements of bread and wine, writing, ‘He therefore that takes the wine away, takes away the very Sacramentality of the mystery.’³²

There is thus much more at stake here than symbolism. What the Gothic revival aimed at in the sacramentality of its architecture and detail was the attempt to know the unknowable in the case of God through *worship* (cf. the same priority in the passage from *Viṣṇudharmottara*, quoted above, p. 15). Advocates of the revival had only to look, by way of contrast, at the existing condition of church services in order to make

their point, exactly as Charles Eastlake did in 1872, in his famous history of the Gothic revival:

We must tax the recollections of our childhood, if we would realise to some extent the cold and vapid nature of the ceremonies which passed for public devotion in the days of our grandfathers. Who does not remember the air of grim respectability which pervaded, and in some cases still pervades, the modern town church of a certain type, with its big bleak portico, its portentous beadle, and muffin-capped charity boys? Enter and notice the tall neatly grained witness-boxes and jury-boxes in which the faithful are impanelled; the 'three-decker' pulpit placed in the centre of the building; the lumbering gallery which is carried round three sides of the interior on iron columns; the wizen-faced pew-opener eager for stray shillings; the earnest penitent who is inspecting the inside of his hat; the patent warming apparatus; the velvet cushions which profane the altar; the hassocks which no one kneels on; the poor-box which is always empty. Hear how the clerk drones out the responses for a congregation too genteel to respond for themselves. Listen to the complicated discord in which the words of the Psalmist strike the ear, after copious revision by Tate and Brady. Mark the prompt, if misdirected zeal, with which old ladies insist on testing the accuracy of the preacher's memory by turning out the text. Observe the length, the unimpeachable propriety, the overwhelming dullness of his sermon! Such was the Church, and such the form of worship which prevailed in England while this century was still in its teens.³³

In contrast to that, the advocates of Gothic revival were aiming to create a way of knowing the unknowable in the case of God through worship, and they were issuing an invitation to others to become a part of that exploration, to move towards God in wonder, awe and praise. And as in India, so here, the word 'movement' was literally meant: their architecture developed 'unbroken internal vistas'³⁴ along which not only the eye but people themselves could approach the altar and sacrament, the very threshold of heaven:

Now I sink before thee lowly,
 Filled with joy most deep and holy,
 As with trembling awe and wonder
 On thy mighty works I ponder;
 How, by mystery surrounded,
 Depths no man hath ever sounded,
 None may dare to pierce unbidden
 Secrets that with thee are hidden.³⁵

Any attempt to glimpse the unknowable nature of God, or to approach the unapproachable majesty of God, has to be in fear and trembling. A way of achieving that was by abandoning one of the founding principles of *early* Gothic. Suger's vision, which had created the distinctive architecture of early Gothic, had been to introduce light – light from Light.³⁶ In contrast, many Gothic revival churches introduced darkness – long vistas still, but now, often, leading into darkness and the faint flicker of far candles emphasising the mystery of God. They created deliberately what Barry's son called 'the dim religious light of impressiveness and solemnity'.³⁷ The question of 'progress in spiritual information', in the context of the Gothic revival, was raised sharply by Compton Mackenzie when he wrote of Michael Fane, both at his first High Mass when 'his brain reeled in an ecstasy of sublime worship' and during his stay at Clere Abbey:

Michael was the only guest staying in the Abbey on the vigil, and he sat almost in the entrance of the quire between the drawn curtains, not unlike the devout figure of some youthful donor in an old Italian picture, sombre against the blazing Vespers beyond. Michael was always hoping for a direct manifestation from above to reward the effort of faith, although he continually reproved himself for this desire and flouted his weakness. He used to gaze into the candles until they actually did seem to burn with angelic eyes that made his heart leap in expectation of the sign awaited: but soon fancy would betray him, and they would become candles again merely flickering.³⁸

Poetry and the Unknowable

The general point, therefore, is obvious: there are people in all the arts who exemplify what it means to be seeking to know the unknowable, and they are at the heart of what we need to understand in order to make progress in spiritual information (see pp. xiii–xiv). But in order to keep this book within limits, poetry was chosen for two main reasons: first, because words are more easily brought into discussion than images; and second, because so many poets have been a part of this progress in spiritual information, by being themselves explorers of the hidden and the unknowable in the case of God.

I examined an early and striking example of this in my chapter, ‘The Death of God in the Greek and Jewish Worlds’.³⁹ The Greek dramatists, Sophocles, Aeschylus and Euripides, did not simply tell the surface stories of Oedipus, or of Hippolytus, or of Orestes, or of Agamemnon, or of Pentheus, and so on: they sought to know what they acknowledge is unknowable, the underlying thread of consequence, of *δίκη*, in which their protagonists are caught up. The result is *tragedy* precisely because humans do not discern what is (from their point of view) the hidden and the unknowable. The question, in the unfolding history of Western theatre, is whether the unknowable *can* be known, and if so how.

An equivalent in Indian poetry is the hidden thread of dharma⁴⁰ in the great epics, *Ramayana* and *Mahabharata*. Both of these might be told quite simply as exciting stories. But both are more than that: they explore the consequence of dharma in the forming of human lives and events. *Ramayana* is set in the second of the four ages through which the cosmos passes, the Treta Yuga. Although the golden innocence of the first age has begun to fade, it is still possible for people in the Treta Yuga to live as they should, according to that rule of law, order and obedience which is the meaning of dharma. *Ramayana* displays in its characters, and especially in Rama and Sita, what the embodiment of dharma actually involves; and since Rama is a manifestation (*avatara*) of Vishnu, *Ramayana* becomes a way of knowing the otherwise unknowable: dharma and the nature of God. In the words of Lakshmi Lal:

He [Rama] is a lesson in that most obsessive of ancient Indian preoccupations – dharma, rule of law and order in the life of a human being, the personal destiny that each one has to discover and then largely follow, but partly shape. The Ramayana is in that sense a compendium of object lessons in morality, a treatise of high thinking. It is the Indian book of values, in which dharma, the code, is all.⁴¹

Mahabharata is set in the next age, Dvapara Yuga, in which dharma has been increasingly forgotten. Superficially, *Mahabharata* is an epic poem about the conflict between two rival branches of the same family, but in fact it is an exploration of the hidden and seemingly unknowable, the working out in human affairs not just of dharma but also of karma;⁴² and beyond that, the relation of God to both. Seen as a conflict between dharma and adharma, it should be the case that dharma always wins, but of course it does not. If karma as the thread of consequence is brought in, can that explain why, for example, Yudhishthira loses all in the game of dice with Duryodhana? It seems unlikely, and *Mahabharata* therefore explores far more deeply the hidden and the unknowable, especially in relation to God, culminating in the eighteen chapters of Book 6 known now as ‘The Song of the Lord’, *Bhagavadgita*.

Those examples of poets (in Greece and India) exploring the hidden and the unknowable in the case of God and the universe come from millennia ago. But there are examples in every age. In India, Rabindranath Tagore (1861–1941) won the Nobel Prize for Literature in 1913 – mainly for his translation of his own *Gitanjali*. He wrote a great deal in prose (twelve novels, about two hundred short stories, thirty-eight plays), but it was in poetry that he explored the unknowable nature of God and the universe. He recalled in *My Reminiscences* (1917) how a life-changing experience of what we would now call AUB⁴³ had led him in his poetry to explore what was otherwise unknowable. He came to think of the infinite and ultimately true, Brahman or God, as bringing into being the canvas on which the universe is painted. That is the work of *maya*,⁴⁴ the power to bring the universe into being in such a way that it invites a deeper understanding and response – and that is why Tagore insisted that the work of a poet is nothing other than an extension of *maya*.

What, then, is to be seen beneath the veil or cloak of *maya*? The universe is the Infinite finding a finite form of expression (cf. the fundamental statement of this in *Viṣṇudharmottara*, quoted above, p. 15), so that the Creator and the created are bound to each other in mutual love. In a strong sense, they require each other for the love of God to be more than self-love:

O thou lord of all heavens, where would be thy love if I were not? . . .
And for this, thou who art the King of kings hast decked thyself in beauty
to captivate my heart. And for this thy love loses itself in the love of thy
lover, and there art thou seen in the perfect union of two. (*Gitanjali*).

For Tagore, therefore, Purusha, the Supreme Person, is like an artist (or poet) who creates a work of art to give expression to an emotion or mood, and also to evoke that emotion or mood in others. Thus the Supreme Person creates the cosmos to express and to evoke love. Of course Tagore knew, as all humans must, that nature includes death-dealing and terrifying disasters, and like all Indians, he did not suppress their terror. In 'Sea Waves', in *Manasi*, he confronted the wreck of a ship carrying eight hundred pilgrims to Puri in 1887 (cf. Gerard Manley Hopkins, 'The Wreck of the Deutschland', 1875–6). Where is God in these 'enraged phenomena'? God is not superficially obvious (obvious on the surface of those events), but is discernible in redemptive love.

Tagore is an obvious example of a poet in the Indian tradition seeking to know the unknowable. So in his own way is Auden in the Christian. Just as Tagore drew on the Indian tradition, so Auden drew on the Greek and then Christian tradition to make a comparable attempt in his poetry to know the unknowable. Throughout his working life, Auden sought to read and understand what he called 'the hidden law', and as a result his understanding of 'the hidden law' changed greatly. In an early formulation, it is indistinguishable from $\delta\iota\kappa\eta$ (the working out of a just and inexorable consequence) as the Greek tragedians had understood it – perhaps not surprisingly, because Auden was born early enough for his education to have immersed him in the classics:⁴⁵

The Hidden Law does not deny
 Our laws of probability,
 But takes the atom and the star
 And human beings as they are,
 And answers nothing when we lie
 Its utter patience will not try
 To stop us if we want to die:
 When we escape It in a car,
 When we forget It in a bar,
 These are the ways we're punished by
 The Hidden Law.⁴⁶

This sense in Auden of an underlying and unknowable purpose working itself out ('Doom is dark and deeper than any sea-dingle/Upon what man it fall') is often expressed in the form of judgement, of the Eumenides in particular. But increasingly his poetry became a quest to know *Deus absconditus* – not, as in this phrase from the Vulgate translation of Isaiah 45:15, the hidden God, but, as in the original Hebrew, the God who hides himself – God who makes himself unknowable as a way of invitation. This is already apparent in the sequence 'The Quest' (1940):

Swaying upon the parapet he cried:
 O Uncreated Nothing, set me free,
 Now let Thy perfect be identified,
 Unending passion of the Night, with Thee . . .

The Nameless is what no free people mention;
 Successful men know better than to try
 To see the face of their Absconded God

Poet, oracle and wit
 Like unsuccessful anglers by
 The ponds of apperception sit,
 Baiting with the wrong request

The vectors of their interest,
 At nightfall tell the angler's lie.
 With time in tempest everywhere,
 To rafts of frail assumption cling
 The saintly and the insincere;
 Enraged phenomena bear down
 In overwhelming waves to drown
 Both sufferer and suffering.

The waters long to hear our question put
 Which would release their longed-for answer, but.⁴⁷

The impediments of 'but' are increasingly dissolved in the continuing response to the invitation to come further, the unyielding struggle, in Auden's subsequent poetry, to know the unknowable. The important point is that it is hard, if not impossible, to imagine a struggle of this kind, at this level of intensity and truth, in prose. If we are trying to make progress in understanding what human spirituality involves, we have to ask ourselves why and how it is poets who struggle in such distinctive ways to know the unknowable. Just before he died, Auden came to this (no doubt provisional) resolution of the hidden law, no longer as impersonal as it had been:

Spring-time, Summer and Fall: days to behold a world
 Antecedent to our knowing, where flowers think
 Theirs concretely in scent-colors and beasts, the same
 Age all over, pursue dumb horizontal lives
 On one level of conduct and so cannot be
 Secretary to man's plot to become divine.

Lodged in all is a set metronome: thus, in May
 Bird-babes still in the egg click to each other *Hatch!*;
 June-struck cuckoos go off-pitch; when obese July
 Turns earth's heating up, unknotting their poisoned ropes,
 Vipers move into play; warned by October's nip,

Younger leaves to the old give the releasing draught.
 Winter, though, has the right tense for a look indoors
 At ourselves, and with First Names to sit face-to-face,
 Time for reading of thoughts, time for the trying-out
 Of new metres and new recipes, proper time
 To reflect on events noted in warmer months
 Till, transmuted, they take part in a human tale.

There, responding to our cry for intelligence, Nature's mask is relaxed
 into a mobile grin,
 Stones, old shoes, come alive, born sacramental signs,
 Nod to us in the First Person of mysteries
 They know nothing about, bearing a message from
 The invisible sole Source of specific things.⁴⁸

This is the struggle in which poets are so often engaged, to explore the unknowable in the case of God and of the universe. The struggle may be expressed in direct terms, as it was in Tennyson's *In Memoriam*, or it may be more oblique, as it was in the case of Emily Dickinson, especially if Martha O'Keefe is right: in her remarkable book *The Farthest Thunder* she relates specific poems to the writings of John of the Cross, but *not* in order to claim that Emily Dickinson was influenced by John of the Cross – indeed, it is extremely unlikely that she had ever heard of him, let alone read anything written by him. O'Keefe's claim is that the profound correspondence of ideas has arisen simply because Emily Dickinson entered into the experiences of which John wrote, as a matter of this struggle to know the unknowable even in and through the dark night. If that is so, it raises truly important questions about the universality of the way in which humans make the deepest spiritual progress or growth through this determination to know the unknowable beneath or beyond the surface appearances of the world.

Notes

- 1 H. Mearns, 'The Psyched' (Antigonish).
- 2 The point is summarised, in the case of Jains, by Dundas:

The *loka* [the universe as Jains understand it] is without beginning or end in time and was not brought into existence through the agency of any divine being. To this extent, Jainism is an atheist religion inasmuch as it regards it as an illegitimate conclusion that there is a conscious creator who can intervene in or control the affairs of living creatures. Such a being, it is argued, would have to be either without a body, in which case a locus for the intention and effort of creation would be lacking or, alternatively, if embodied, unable to fulfil the necessary requirement of being all-pervading, since in that case the ontological categories would not find any room in the *loka*; alternatively, if non-pervading, such a god would have to be an entity possessing component parts and thus non-eternal. In short, for the Jains, deities such as Brahma and Vishnu, whom Hindus credit with a creative role in the universe, are themselves subject to the process of rebirth in the same manner as all other embodied souls in the *loka*.

(P. Dundas, *The Jains*, London: Routledge, 1992, p. 77).
- 3 *Prakriti* and *purusha* are the two fundamental constituent principles that bring all appearances into existence. *Purusha* is the consciousness of personal being which, if it gets entangled in inert matter (*prakriti*) is bound to rebirth until it recovers its independence. Samkhya and Yoga are systems that teach the way of liberation.
- 4 M. C. Taylor, *Erring: A Postmodern A/Theology* (Chicago: University of Chicago Press, 1987), p. 4.
- 5 There is a highly compressed introduction to these terms and their relation to analogy in my *God: A Brief History* (London: Dorling Kindersley, 2002), pp. 268f.
- 6 'The soul enters the unity of the Holy Trinity but it may become even more blessed by going further, to the barren Godhead, of which the Trinity is a revelation. In this barren Godhead, activity has ceased and therefore the soul is most perfect when it is thrown into the desert of the Godhead, where activity and forms are no more, so that it is sunk and lost in this desert where its identity is destroyed and it has no more to do with things than it had before it existed. Then it is dead to self and alive to God.' R. B. Blakney, *Meister*

Eckhart: A Modern Translation (New York: Harper, 1941), pp. 200f.

- 7 On the failure of memes as a theory, see my *Is God a Virus: Genes, Culture and Religion* (London: SPCK, 1995), pp. 67–77.
- 8 Among the most popular of the many stories told about Krishna are those that concern his dealings with the Gopis, the young milkmaids who herd the cows in Vṛindavana. His passionate dances with them are described in ecstatic physical terms of human love, a love that both prefigures and is the furthest reach of the exchange of love between humans and God. Although there are 16,000 of the Gopis, each feels that she alone is the love of Krishna. But there are repeated episodes in which Krishna deliberately absents himself, so that their love of Krishna/God is tested and deepened through the grief that his absence causes. Thus each day Krishna takes the cows into the forest and returns only in the evening to the gopis: this encourages them to keep him in mind and thought during the time of his absence, knowing that he will return. Or again, whenever Krishna became aware of their self-conceit and pride, because they were the recipients of his love, he deliberately hid himself for as long as it took for them to come to their senses, to learn to live with his absence, and to calm down. But far more dramatic was the final separation, which resembles something not unlike the Christian understanding of the Ascension, after which, for Christians, the absence of Christ is nevertheless a continuing form of invitation.
- 9 There is an elementary and brief account of this in my *God: A Brief History*, pp. 92–101. The major account is that of F. E. Hardy, *Viraba-Bhakti: The Early History of Kṛiṣṇa Devotion in South India* (Oxford, Oxford University Press, 1983; Oxford India Paperbacks, 2001). However, it should be borne in mind that his main thesis, the distinction between intellectual Krishna *bhakti* and emotional Krishna *bhakti*, has been challenged by Indian scholars: see, e.g., S. M. S. Chari, *Philosophy and Theistic Mysticism of the Alvars* (Delhi: Motilal Banarsidass, 1997), pp. 155–7. It would also be challenged by the neuroscientific research of recent years on the ways in which rationality and emotion work together, summarised in my *The Sacred Neuron* (London: I.B.Tauris, 2005).
- 10 J. T. Cushing, *Philosophical Concepts in Physics: The Historical Relation Between Philosophy and Scientific Theories* (Cambridge: Cambridge University Press, 2003), p. 103.
- 11 Quoted from D. J. Boorstin, *The Discoverers: A History of Man's Search to Know His World and Himself* (London: Phoenix, 1983), p. 407.
- 12 J. C. Maxwell, 'Action at a Distance' and 'Ether', in *Scientific Papers*, vol. 2 (Cambridge: Cambridge University Press, 1890).

- 13 A. Moskowsky, *Einstein the Searcher: His Work Explained from Dialogues with Einstein* (Berlin: Fontane, 1921), p. 4.
- 14 B. Bertotti, 'The Riddles of Gravitation', in R. Duncan and M. Weston-Smith, eds, *The Encyclopaedia of Ignorance*, vol. 1 (Oxford: Pergamon Press, 1977), pp. 92–8.
- 15 J. C. Taylor, *Hidden Unity in Nature's Laws* (Cambridge: Cambridge University Press, 2001).
- 16 The lecture was entitled, 'Nineteenth Century Clouds over the Dynamical Theory of Heat and Light'. The first cloud was to know how, in a Newtonian universe, one could account for the uniform speed of light (established through the Michelson–Morley experiments) if the earth is moving through 'an elastic solid as essentially is the luminiferous ether' (the ether having been postulated in order for light waves to have something through which to propagate). The second cloud was to know how to account for 'the Maxwell–Boltzmann doctrine regarding the partition of energy'. Many attempts were made to circumvent these two clouds of unknowability – in, for example, the suggestion of Fitzgerald and then of Lorentz to rescue the aether by supposing that the apparatus of the Michelson–Morley experiment had been foreshortened in the direction of its own motion. But plunging into the two clouds were Einstein and Planck who persisted with the apparent unknowability of the behaviour of light and of molecules of gas. By responding to the invitation of unknowability, the worlds of relativity and of quantum mechanics were opened up. For a summary and discussion of the 'clouds' in Kelvin's lecture, see my *Licensed Insanities: Religions and Belief in God in the Contemporary Word* (London: Darton, Longman and Todd, 1987), pp. 44–9.
- 17 Taylor, *Hidden Unity*, p. 367.
- 18 On the distinction between coherence and correspondence in science, see my *The Sacred Neuron*, pp. 122–30. For a recent challenge to string theory, see P. Woit, *Not Even Wrong: The Failure of String Theory and the Continuing Challenge to Unify the Laws of Physics* (London: Cape, 2006). The title comes from the three categories of error ascribed by the physicist Wolfgang Pauli to unconvincing theories, wrong, completely wrong, and not even wrong (i.e., without even the merit to be considered).
- 19 Quoted from A. Pais, *Subtle is the Lord* (Oxford: Clarendon Press, 1982). Bohr's recollection of the statement 'Gott würfelt nicht', God does not play dice, is in P. A. Schlipp, ed., *Albert Einstein: Philosopher-Scientist* (Evanston: Library of Living Philosophers, Inc., 1949), p. 218. By that statement, he meant that the statistical laws necessary to explain the subatomic world are only a provisional

- necessity. The hidden or more fundamental laws would surely determine events rather than their probabilities. But that statement, God does not play dice, would make no sense at all to Shaivite Indians. For them, it belongs to the nature of God in relation to creation that the game of dice belongs inherently to it. God playing dice appears in poems, carvings, myths, and paintings, all over India. It is an expression of the belief that there must be some contraction on the part of God, even some risk on the part of God, if the universe is to appear, and if its history is to unfold. One might imagine that when God plays dice, God must know the outcome in advance, and thus is not really committed to the game. But the point being expressed here is that even an omniscient God can only know what there is to be known: what is, from the point of view of the game, a future outcome does not exist to be known. In that sense, God has to approach the universe as being, in important ways, unknowable. God, therefore, puts himself at risk in creation, and even, so the myths claim, loses something of himself: that, at least, is what happens when the God plays dice with the Goddess, because he loses some of his attributes to her. On all this, see D. Handelman and D. Shulman, *God Inside Out: Shiva's Game of Dice* (Oxford: Oxford University Press, 1997).
- 20 J. Bell, *Speakable and Unsayable in Quantum Mechanics* (Cambridge: Cambridge University Press, 1987), p. 160.
 - 21 G. de Chirico, 'Mystery and Creation', quoted from H. B. Chipp, *Theories of Modern Art: A Source Book by Artists and Critics* (Berkeley: University of Californian Press, 1968), p. 401f.
 - 22 *Phaidon Encyclopedia of Art and Artists* (Oxford: Phaidon, 1978), p. 126.
 - 23 Translation from S. Kramisch, *The Viṣṇubharmottara*, Pt. 3: *A Treatise on Indian Painting and Image-Making* (Calcutta: University of Calcutta Press, 1928), reprinted in B. S. Miller, ed., *Exploring India's Sacred Art: Selected Writings of Stella Kramisch* (Philadelphia: University of Pennsylvania Press, 1983), p. 263.
 - 24 For the claim that Rodin had cast from life, and for his response, see my *The Sacred Neuron*, pp. 57f.
 - 25 *Bṛihadaranyaka Uṇ.* 1.3.28. Shankara's Commentary makes it clear that 'darkness' is understood as 'ignorance' and 'death'.
 - 26 Krishna was given earlier (p. 6) as an example of the deliberate withdrawal of God into unknowability, but the theme occurs constantly in the Indian traditions, as, for example, in the deliberate withdrawal of Shiva, who turns deeply inward to exist simply in his own essence and nature. In a widely told myth, Shiva was plunged into inconsolable grief after the death of his wife, Sati. He wandered for many days carrying her body and refusing to yield it.

In order to dissipate his grief, the gods cut her body into pieces and scattered the pieces throughout the land – an aetiological explanation of how the shrines of the goddess came into being. None of this, however, consoled Shiva, and he decided to withdraw from the world and from contact with humans in order, in the central practice of yoga, to generate *tapas*, the consuming heat of the Divine nature deeply within himself. But Sati was reborn as Parvati, and her desire for God, for Shiva, was reborn with her. With her father's permission, she also devoted herself to *tapas*, in order to find and espouse herself to God. But Shiva was of course withdrawing further into himself and further from her, even as she sent out her desire and longing for him. Meanwhile, the fierce Demon Taraka was ranging about the world, seeking whom he might devour, and the gods knew that no one could ever defeat the Demon except a son of Shiva. But since Shiva had withdrawn into his own inner nature, clearly he would never produce a son, so Indra, the ruler of the gods, decided to send Manmatha, also known as Kama, Desire itself, on a final mission to shoot his arrows at Shiva and thus to bring him back into connection with the world and with those who seek and desire him. Manmatha/Kama found Shiva on the mountain, performing the yoga which was on the point of leading him into the final realisation of his own essence. Manmatha/Kama shot an arrow and struck Shiva in the heart. Shiva turned and saw Manmatha/Kama and in anger burned him to death with the fire from his third eye. But at the same moment, he also saw Parvati and immediately desired to be united with her. To test her, he disguised himself as an old and ugly beggar and attacked Shiva and the way in which he lives in burial grounds and smears himself disgustingly with ashes from cremated bodies. Parvati was not swayed at all and insisted on her love for Shiva. Shiva therefore revealed himself as he is and they are committed to each other in mutual love. In this myth, God deliberately withdraws and absents himself from the world, and he creates grief and desire in so doing. But out of that grief and desire comes a final and complete union.

- 27 Stephen Huyler, *Meeting God: Elements of Hindu Devotion* (New Haven: Yale University Press, 1999), pp. 116–120.
- 28 Ibid., p. 132.
- 29 C. Brooks, *The Gothic Revival* (London: Phaidon, 1999), pp. 239f.
- 30 Ibid., p. 250.
- 31 K. Clark, *The Gothic Revival: An Essay in the History of Taste* (London: Constable, 1950), pp. 215f.
- 32 *Doctor Dubitantium*, 1660, 2.3 (Rule 9.31).

- 33 C. L. Eastlake, *A History of the Gothic Revival* (New York: Leicester University Press, 1970), p. 117.
- 34 When James Wyatt created these 'long internal vistas' in the cathedrals of Salisbury and Lichfield by clearing out whatever stood in the way, he earned for himself the nickname, 'the Destroyer'.
- 35 C. Winkworth, trsl. of a hymn by J. Frank, 'Deck thyself, my soul, with gladness'.
- 36 See, e.g., 'Architecture: The Houses of God', in my *God: A Brief History*, pp. 276–7.
- 37 Barry was, with Pugin, the architect of the House of Commons. In using this phrase, Barry's son was writing about the compromises that his father had had to make in order to accommodate in Gothic churches worship based on the Book of Common Prayer: see Clark, *The Gothic Revival*, p. 142.
- 38 C. Mackenzie, *Sinister Street* (London: Macdonald, 1949), pp. 192, 213.
- 39 J. Bowker, *The Religious Imagination and the Sense of God* (Oxford: Oxford University Press, 1978; Oxford: Oxford Scholarly Classics, 2000), pp. 97–120.
- 40 Dharma, a fundamental word in Indian thought and life, comes from a Sanskrit root meaning 'to hold' or 'to uphold'. Dharma pervades the whole of Hindu life, and refers to the way in which all things and all people ought to behave if the order of the cosmos and of individual and social life is to be maintained. What is now called 'Hinduism' (i.e., the Indian family of related religious beliefs and practices) is really a map of *dharmā*, a map of how people should behave appropriately in whatever circumstances they find themselves. In fact, an Indian name for its own religion is *sanātana dharmā*, everlasting *dharmā*.
- 41 L. Lal, *The Ramayana* (New Delhi: Disha Books, 1992), p. 3.
- 42 Karma is the strict law of consequence with regard to action, which is the driving force behind the continuing process of rebirth or reincarnation in Asian religions. By this law, every action has a consequence that will come to fruition, either in this or in a future life. Karma is not in itself 'reward and punishment', but is the law as natural in the universe as the law of gravity which produces consequence.
- 43 Absolute Unitary Being. Tagore described his experience in *My Reminiscences* (London: Macmillan, 1921). On this, see further my 'Tagore and India', in *Hallowed Ground: Religions and the Poetry of Place* (London: SPCK, 1993), p. 39.
- 44 *Maya* is often translated as 'illusion', but more fundamentally it is the power through which God brings the universe and all things into being. *Maya* therefore belongs intrinsically to the nature of God, since the universe expresses that nature not 'at a distance' but as God and as access to God. Nevertheless,

the universe and all appearances within it are to most people a veil behind which the true nature of God remains hidden, because through ignorance such people 'read' the universe in deficient ways. In that sense *maya* as cloak or veil is equivalent to ignorance and illusion: *Brahman satya jagat mithya*: Brahman is real, the world is an illusion.

- 45 Some of the earliest poetry that Auden could remember and recite to the end of his life were the mnemonics in Kennedy's *Shorter Latin Primer*: see his *A Certain World* (London: Faber, 1971), p. 263.
- 46 W. H. Auden, 'The Hidden Law', in E. Mendelson, ed., *W.H. Auden: Collected Poems* (London: Faber, 1994), p. 264.
- 47 'The Quest', in Mendelson, *W.H. Auden*, VII, p. 288; XVII, p. 294; XIX, p. 295.
- 48 'In Due Season', in Mendelson, *W.H. Auden*, pp. 801f.

A Taxonomy of Absence

John Rodwell

I.

‘Some noughts are noughtier than others’

Joyce Lambert, ecologist,

in conversation, 1969

Encounters between humans and the natural world in which we find ourselves, particularly with its animals and plants which have lives of their own, are fundamental to the development of natural science and a confirmation of the knowability of what lies within the realm of our senses. Such encounters form the fabric of the early phases of observation and description in science, the formalising of diversity and relationships in shared languages of nomenclature and taxonomy and a capacity for modelling the patterns and processes that occur among living organisms and the world in which we know that we and they occur together.

It follows that the distinction between the unknown and the unknowable goes to the heart of scientific method, because it depends on understanding the reasons why some claimed or hoped-for encounters are not feasible, and why some are simply not possible. In other words, it involves careful reflection on the reasons, on a long spectrum, for the absence of that which one had hoped to encounter.

Recapitulated in generations of human newcomers to the process of knowing, the encounters that do occur often provide an unforgettable

initiation into a lifelong fascination with nature and maybe a first step in a scientific career devoted to trying to understand it. For me, as a young child, these first encounters were with ants which were brought to my school as a living colony in a formicarium by a student teacher, and which, each morning, I was allowed to feed with a dollop of sugar syrup.

I did not myself become a professional entomologist but it was with such insects that I first learned to watch and wonder, to study behaviour and to categorise the species I saw by reading the accounts that others before me had made of their own experiences with ants. Thus I knew that I had myself observed the presence of *Acanthomyops niger* in my own back garden while, when the writers of the Book of Proverbs commended a study of ants as an inspiration to our activity and wisdom ('Go to the ant thou sluggard': Proverbs 6:6), they were, far away in time and space, probably encountering some species of *Pheidole*.

When I myself became an ecologist (a student of the οἶκος or household of nature), I learned that the where and when of such encounters was more than the tradecraft of natural history but the basis of understanding the knowable relationships between such organisms and the various environmental factors on which they are dependent. Likewise, not to encounter such and such a plant or animal, to have in a matrix of records a nought at the intersection of a creature's name and the opportunity for observation, this was more than simply disappointment – it was to understand, my research supervisor Professor Joyce Lambert began to show me, that there was what we might call a taxonomy of absence.

Thus, at a particular time and place of observation, an absence may mean:

- that a creature existing somewhere or other could not ever subsist under the conditions that we can observe and measure here and now, and is thus in the strict sense unknowable in such circumstances (let us call this necessary absence, which has its own risks and temptations, treated in II below);
- could in theory be present but for some reason is not, either because of chance (statistical absence, II), some strategy (strategic absence, III) or by choice (volitional absence, IV);

- appears to be absent but is not (false absence, IV);
- or does not any longer exist anywhere and so could never occur here and now at all (extinct absence, V, another instance of unknowability).

Also, it seems that the continuing interactions between curious humans and a nature open to knowing go on revealing creatures that are totally new to us, so there may be many absences that have yet to define themselves as the converse of revelations which we all still await (undiscovered absence, VI).

II. Statistical absence

In those parts are creatures bizarre and horrible: the black-mouthed catshark, the great forebeard, the duff, the flying squid, the Esmark's eelspout and an angler fish that is a shiny lump of feminine flesh to which is appended the male. He buries his head in her soft underbelly. She digests it and he continues life only as a sperm donor.¹

In ecology, a key way to comprehend whether a particular species (or an individual of such a species) can be present or may be absent is to define the niche, and measure whether this is 'realised' or not. Every plant or animal species has its niche – that unique combination of habitat factors which provides living space and food supply to enable it to subsist and produce another generation – important measures of biological success.

Not every possible niche is fully or permanently occupied because there is about nature a coming and going which is related to temporal shifts in environmental conditions, competition within and between species and the complex interdependencies of predator and prey. Understanding these patterns and processes, just what meaning there is in the observed presence and absence of organisms in this or that situation, is what gives ecology its descriptive and predictive power – and its imaginative appeal.

In fact, as in all observational disciplines, some statistically reputable sampling procedure will usually be used to bring economy and rigour to

the investigation, ensuring that there is sufficient replication, but no waste, among our samples of presence and absence to give conviction to our observations and hypotheses about what may be found where (or not) and why. Some probabilistic element in our analysis will acknowledge the level of uncertainty inherent in all such quests for encounter and understanding.

More particularly, we will know, with some measure of confidence, whether it is worth waiting longer for an encounter or not, whether it is worth returning to the same situation or place, just what chance there is of absence becoming presence here and now – or then. ‘No matter, try again, fail again, fail better’, as Samuel Beckett said.² Or whether, maybe, it is worth looking elsewhere to test and validate our notions of just what presences and absences lie at the moment beyond our ken, but from where others may have given us report. Repeated, extended, shared – such investigations contribute to our (still) accumulating appreciation of the patterns and processes of the natural world and help give the knowability of its presences and absence a common currency among practitioners.

Yet, for many, the subdued propriety of scientific method is not really sufficient to explain the drive to end the deprivation that the absence of particular creatures entails. One more obsessive manifestation of this is the serial accumulation of sightings which motivates the ‘twitcher’, who is driven far and wide to add to his (interestingly, this is usually a male phenomenon) list of birds seen this year or during a lifetime.

This kind of impulse, entertainingly described by Stephen Moss in his *A Bird in the Bush: A Social History of Birdwatching*,³ is writ small in many natural scientists, maybe all. We see it, for example, in that crazy quest for encounter which made Redmond O’Hanlon spend two weeks in a trawler on the tumultuous seas over the Rockall Trough and the Porcupine Abyssal Plain off the north-west coast of Scotland finding fish he had previously only heard tell of.

There is a cost to such endeavours. At its most base, such questing can engender a sense of ownership when absence is brought to an end in an obsessive and competitive checklist of our sightings. More unnervingly, to challenge absence is risky, since what is there may make, in turn, some claim on us which is greater than we bargained for. Perhaps, as for Seamus

Heaney, who entertained himself with tadpoles in the lost days of childhood, the mature frogs, great slime kings, will one day be gathered for vengeance, waiting to clutch the hand which he dipped into their spawn.⁴

III. Strategic absence

Oldest they are and the wisest of beasts
so they know at last
how to wait for the loneliest of feasts
for the full repast⁵

Environments vary in stability, so that, in nature, some niches last long, others are temporary. In stable environments, the most successful and consistently present animals and plants are often bulky, breed slowly with few young and much aftercare and live long. The elephant (*Elephas maximus* is the name of the Indian species) and Californian redwood (*Sequoia sempervirens*) are prime examples of such a ‘competitive’ strategy where surviving generally means outdoing your less successful rivals – note the way in which the scientific epithets of these organisms invoke (translated from the Latin) this superlative character, the biggest and the everliving.

By contrast, ‘opportunistic’ is the term for the strategy of those plants and animals whose presence is strictly confined to the (often brief and fleeting) situations when time and place in a regularly changing or generally unstable environment are congenial for their appearance, growth and reproduction. Sometimes, such situations are seasonal, as with annual plants or mayflies of equinoctial climates whose appearance is governed by (more or less) predictable shifts in temperature and rainfall in the passage of a year.

In other cases, the opportunities when conditions are suitable are more sporadic – like the flash flooding of a river or the rare downpours that occur in some deserts. Either way, such creatures are often more absent than present within a given time span, even though we know they are ultimately knowable.

Typically, such organisms are uncompetitive and maximise the chance that they can exploit a suitable situation whenever and wherever it arises

by being very fecund and widely dispersing their propagules with little requirement for aftercare. Often small creatures, they may be completely lost from sight in some phase of their lifecycle, being protected against uncongenial conditions (in the form of resistant seeds, for example) and waiting upon the next coincidence of suitable time and place in which to reveal themselves for a further turn of their lifecycle. Such moments can come as a surprise to us, not always welcome – as when a reassuring absence of weeds is brought to a swift end by tilling a garden and so providing a congenial seedbed for exposed stores of seeds.

A particularly distinctive kind of such strategic absence occurs when animals shift in mass migrations from seasonally unfavourable environments to other places, often many thousands of miles distant, like salmon (*Salmo* species) and the swallow (*Hirundo rustica*). The departure of the last of such creatures, when it becomes clear that, for a season, their absence will ensue, is sometimes invested with great emotional weight for the observer.

IV. Volitional and false absence

I say nothing for fear of bringing the expedition to a premature end and stand stock still as a trickle into my right boot gathers strength. Slightly raising my eyes towards the deeper water in front, I see a seemingly transparent grey ghost gliding into view. It pauses briefly but before I have time to get over my wonder, it spots me and magically is no longer there.⁶

A young boy at the time, armed with a net and his *Observer's Book of Freshwater Fishes*, Richard Shelton had in fact seen, and then not seen, his first salmon trout (*Salmo trutta*). His enthusiasm sparked by this early book purchase and his first encounters, he later became a fish biologist, learning that the secret of this creature's apparent disappearance were silvery crystals of guanine, arranged in rows in its scales, which, when in parallel with the sun's rays, act as reflectors, thus giving an illusion of transparency. Such cryptic ploys are widespread among animals and plants in the natural world, having evolved as a protection against predation or as part of the armoury of disguise to aid in their own wait for prey.

Where it is a human that is hunting for an encounter, such apparent absence can be ultimately frustrating but, along the way, part of the pleasure of the stalk and perhaps, in its prolongation, a refinement of the satisfaction that eventually comes from presence. In sophisticated pursuit, both searcher and quarry may affect disguise or so play at subterfuge that teasing seems an appropriate word to use – the kind of encounter used to exquisite perfection as a metaphor for courtly loving by Edmund Spenser in ‘Like as a Huntsman after Weary Chase’ (in *Amoretti* of 1595). Of course, where arrow or gun, rather than the eye or camera (or heart), provide the weaponry, the prospect of an afterlife to the encounter is one-sided.

Field craft and professional acuity can help here, that accumulated experience of previous encounters which informs discernment at perhaps a remote and uncertain boundary between presence and absence. Maybe, also, there will be telltale signs of a hidden presence tantalisingly close at hand – remains of food, dung, fresh tracks. As a child, I remember very clearly finding the scrape or form where a hare (*Lepus capensis*) had been lying up – so recently vacated that the earth was still warm, an image I later found had great resonance for the poet R. S. Thomas, an adept at discerning absence in nature (see p. 177).

Powerful as the human species is as scientist or other kind of hunter for encounter, cryptic presence among animals can still have deadly consequences for us, as with those venomous snakes whose scales resemble the forest or grassland floor or which nestle hidden just below the surface of the sand – until we tread on them, after which we ourselves may enter the realm of absence for others here and now.

V. Extinct absence

He soon after learnt that the female had been killed with a stone while sitting on her egg, and that the male was still in the neighbouring bay
The zeal of the islanders being roused, he was at length (also) killed.⁷

Though the Great Auk (*Alca impennis*) figured in the first edition of James Fisher’s *Bird Recognition*⁸ with the same kind of descriptive account of its

appearance and lifecycle as all the other species, it had been absent from British coasts since William Foulis shot the male bird described above on the island of Papa Westray in May 1813 and was finally exterminated on Eldey, a skerry off Iceland, in 1844. Or, at least, we suppose so, because the bird has not been reliably seen since.

Extinction, for whatever reason – and huge numbers of extinctions have been natural – represent a particularly final kind of absence for us now. Where these extinctions have been in historical time, it may take a lengthy period for accumulating absences in old haunts to decently convince us of final demise. Alfred Newton, a nineteenth-century ornithologist, went on hoping for the Great Auk that ‘there might be still “some happier island in the watery waste” to which these Penguins of the western seas may have escaped’.⁹

Yet, continued searching (or chance) sometimes turns up now creatures that have been previously known to us only from remains and which have been presumed long extinct. Most famous of all is the coelacanth, a fish of the genus *Latimeria* which, until one was hauled from the Indian Ocean in 1938, was known only from fossils no younger than 70 million years old. A second species turned up in 1999 and presumably there might be more species and many living individuals hidden in the deep.

Such organisms, evoking the biblical story (Gospel of St John 11:1–44), have been called ‘Lazarus taxa’ and, in this particular case, for those not fortunate enough to have had a direct experience of them, a virtual encounter can be contrived via the website of the Coelocanth Rescue Mission, an organisation dedicated to ‘raising coelocanth awareness’. Incidentally, palaeontologists use the term ‘Elvis taxa’ to describe living creatures that bear a striking resemblance to extinct organisms but which do not live up to the promise of bringing such definitive absences to an end.

VI. Undiscovered absence and the limits of knowing

but looking always worked towards a word
trading the limits of speech
for the unsaid presence,
the way the bird

that vanished through the leaves
is true forever now, being unseen.¹⁰

The search for encounter (or accidents) may, even now after centuries of accumulated scientific discoveries, still go on revealing to us the presence of animals or plants previously completely unknown. When ants first engaged my own rapt attention, for example, in the 1950s, there were probably 15,000 species known to science, with perhaps 300 totally new ones being described every year.

This provokes the uneasy realisation that the extent and internal architecture of the absence we experience in the scientific quest may not be the obverse of the presences we have already recorded. This gives a kind of queasy asymmetry to the notion of knowability. It is also an insistent reminder that the breaking of this particular boundary of unknowability depends on keeping one's eyes, ears and mind open, on remaining attentive to what one does not know and what may well seem to be unknowable, and on remembering that scientists live always in a kind of *docta ignorantia*.

For natural scientists, therefore, the most immediate task is to identify the limits of what is yet unknown and consider in what ways, by research and experiment, that boundary can be pushed back. There is an absence of knowledge, understanding and insight which we hope to change into presence. But at the ends and edges of the spectrum of absence, there remain the intriguing, perhaps frustrating, invitations of unknowability. The taxonomy of absence here reviewed suggests that to close one's eyes to the unknowable and to refuse its invitations, may be a major diminishment, not just of one's science, but of one's humanity. And while we wait on such invitations, our memory adds its own richness to our understanding of what we already know about nature and ourselves.

The centre of Iceland is one of the most lonely and silent places I have ever visited – a great gravel plain with big winding rivers, the far distant horizon marked by the curving surfaces of the Langjökull and Hofsjökull glaciers. As I was standing quite alone there, under the vast Arctic sky, one July day in 1968, there came from beyond my field of vision to the right, the slow rhythmic sound of khwew, khwew, khwew. Passing low in front of me, not twenty metres away, a solitary whooper

swan flew by, its big white body pulsing under the wing thrusts, khwewing against the still summer air. And then it was gone.

I have seen whooper swans quite often since – they are not rare birds in Britain, but are winter visitors in some numbers. Yet there is not a year goes by that I do not remember that particular occasion, even in the absence of any fresh encounter. Of course, such recall from accumulated experience helps weigh new encounters discriminantly against earlier ones: this refines our identification skills so that we are sure we are really in the company of what science calls *Cygnus cygnus* and not something previously unknown.

But also, along with such professional demands, there is a richer kind of memorialising of such events, which makes present in the fabric of the imagination an other that helps define who we are, and which leaves us knowing that we do not ourselves belong entirely among things which are present here and now.

Notes

- 1 K. Rusby, *The Guardian*, 25 October 2003, a review of R. O'Hanlon's *Trawler* (London: Penguin, 2003).
- 2 Samuel Becket, *Worstward Ho* (London: Grove Press, 1983).
- 3 Stephen Moss, *A Bird in the Bush: A Social History of Birdwatching* (London, Aurum, 2005).
- 4 From 'Death of a Naturalist', in *Selected Poems* (London: Faber & Faber, 1980).
- 5 'The Elephant is Slow to Mate', in D. H. Lawrence, *Complete Poems* (London: Penguin, 1964).
- 6 R. Shelton, *The Longshoreman* (London: Atlantic Books, 2004).
- 7 Patrick Neill, *Scots Magazine*, 1814.
- 8 James Fisher, *Bird Recognition* (London: Penguin, 1954).
- 9 J. Gaskell, *Who Killed the Great Auk?* (Oxford: Oxford University Press, 2000).
- 10 'Taxonomy', in J. Burnside, *The Light Trap* (London: Cape, 2002).

Understanding the Radiant Sun: The Unknown and the Unknowable in an Example of Scientific Approach

Ramanath Cowsik

I. Preamble

From the beginning of time, all living things have been influenced by the radiant light and heat of the Sun and its periodic motion across the sky, which gives rise to day and night and the seasons. Also, from the very early days, the Sun, Moon and the stars stimulated the physical, intellectual and spiritual growth of humans. Accordingly, humans charted their movements, meditated upon their nature and their relationship to the world in which we live.

That struggle in the past was frequently one of making the unknown nature of the Sun, the Moon, and the stars better known. Astrology, for example, sought to map the relationship of the stars and planets to human life in such a way that at least some of the perplexities of the unknown (of the future, for example) might be removed.

The advance of science suggested that that kind of unknown was in fact unknowable – that the relation of the stars and planets to us is of such a kind that the future happenings in our mundane lives cannot be known or predicted from them (though there are some who have still to be persuaded of this). But science itself has had its own struggle with the unknown and perhaps unknowable as it attempted to advance in its understanding of the Sun. It is the purpose of this chapter to give a

brief exposition of this saga, which involves three challenges to the principle of the conservation of energy.

The story begins with a particular emphasis on the despondency of nineteenth-century physicists in trying to understand the longevity of the Earth and the prodigious energy output of the Sun, and goes on to describe the patient and persistent struggle during the twentieth century that led to the knowing of the apparently unknowable – the internal constitution and workings of the radiant Sun. My hope, here, is to show how advances in science often identify that which seems to be unknowable, but how also, by a continuing and patient struggle with the unknowable, it may in fact in some instances become known. Perhaps this chapter may stimulate further investigations into the methods of this struggle, that is, into the workings of early twenty-first-century science, which seems to have aspects that either were not present before or were much more subdued in the past.

It is important to state at the outset that the attitudes of scientists towards ‘knowing’ and ‘truth’ may be very different from those of ordinary people, or even from those of a philosopher. Understandings of scientific knowledge and of scientific theories vary greatly, and have been subjected to extensive analysis. Without detailed reference to these discussions, we merely note that the meaning of unknowability and the unknown may well vary from one perspective to another.

Nevertheless, it can at least be said that many scientists would understand themselves to be building a ‘model’ based on their observations of the external world, and it is this model that they describe in detail, and use mathematical means in order to predict its behaviour. Insofar as this model reproduces the observations of the external world and predicts the outcome of further observations or experiments, they call it a good model. Any contradiction with observations or with results of experiments does not necessarily make them abandon the model altogether, but in several instances merely makes them assert that the model is ‘not useful’ in the description of those specific phenomena. For example, the Newtonian theory of gravitation does not reproduce the advance of the perihelion of the planet Mercury, but it is still useful in the description of a huge number of phenomena. Again, the kinetic theory of gases fails to reproduce

correctly the specific heat of diatomic and polyatomic molecules, but remains very useful and is not abandoned. Time and again more sophisticated models are developed – the general theory of relativity, quantum mechanics, and so forth. They subsume earlier ideas; however, their complexities are not called for in explaining everyday phenomena.

The underlying idea is that scientists wish to provide a description of a diverse set of phenomena based on a small set of assumptions that also prompt them to observe nature in more specialised situations. Sometimes they create these special conditions and call them experiments. This attitude is not new. As far back as the fourteenth century William of Ockham spoke of it, and Newton enunciated it in the second volume of *Principia*: ‘We are to admit no more causes of natural things than such as are both true and sufficient to explain their appearances . . . more is in vain when less will serve.’ To use the words of another great physicist, Murray Gell-Mann, ‘Whatever is not forbidden is compulsory.’ Gell-Mann’s remarks were made in the context of symmetry principles on which much of modern physics is built up. These principles state succinctly the rules all physical processes follow. It is more economical to state these symmetries than list an almost infinite number of processes and events that cannot occur. Thus, even though there are entities like the wave function and its phase which can never be measured (unlike their squares or phase differences), we may see that there is a clear distinction in the attitude of scientists with respect to others towards knowing and what they call truth.

II. Introduction

The story that I am going to unfold reached its climax very recently with the publication of a paper in *Physical Review, Letters* (2004), which had an authorship of about 120 scientists, and another in *Nature* (2005) with about 100 authors.¹ The beginnings of the story are hidden in antiquity, perhaps dating back to the time when sentient beings appeared on the Earth. Even though I have to be extremely brief in relating this story, for which I apologise even at the outset, I feel that the story is worth telling. It is one of the finest examples in science that clearly brings out the

scientific approach to what some have thought or even said is unknowable, its patience and perseverance, its uncompromising adherence to truth against all odds, and its humility. The story relates to the Sun and to what powers it to shine forth with nearly constant luminosity for billions of years.

By the time of the Renaissance, one had a reasonable set of observations of the distances to the Sun and the Moon and even the orbits of the planets. This allowed Nicolaus Copernicus (1473–1543) and Nilakantha Somayaji (a contemporary) to restate the heliocentric hypothesis with some conviction. Giordano Bruno (1548–1600) conjectured that the stars were self-luminous bodies, similar to the Sun, and had planets and worlds of their own.

The intellectual ferment of the Renaissance brought forth many great thinkers, and led to improved observations of the orbits of planets and other physical phenomena. In the year 1572, Tycho Brahe observed the supernova – the appearance of a new star in the heavens – and recorded the orbits of the planets to a remarkable accuracy. Upon Tycho's death, his student Johannes Kepler (1571–1630), after an act of petty larceny, gained access to Tycho's papers (which were held jealously by Tycho's surviving family) and from there derived the three crucial laws of planetary orbits: (1) the orbits of planets are ellipses with the Sun at one focus, (2) the orbits trace equal areas in equal times and (3) the square of the period increases as the cube of the semi-major axis of the ellipse. This was truly a tour de force of geometry, and paved the way for the dynamic theories that followed. Galileo Galilei (1564–1642) observed that the heavenly bodies had imperfections (in the Platonic sense) and attributed the absence of parallaxes of stars to their great distance from the solar system. He is considered the father of the modern scientific method, and he began a series of experiments that probed the nature of gravitation. Mathematical methods also developed hand in hand, and in this the extraordinary contributions of René Descartes (1596–1650) are to be acknowledged.

Then Isaac Newton (1642–1727) appeared on the scene and marshalled all the known facts about the heavenly bodies and terrestrial objects into his *Mathematical Principles of Natural Philosophy* (*Philosophiae Naturalis Principia Mathematica*). On the basis of his dynamic theory he could state with confidence, 'Hitherto we have explained the phenomena of the heavens and

of our sea by the power of gravity.’² His theory is called ‘universal gravitation’ because both the heavenly bodies and Earth-bound objects obey the same laws. Moreover, the force of gravity of a body is inversely proportional to the square of the distance and directly proportional to its mass – irrespective of its composition. The Heavens had descended to the Earth and there was no distinction. Despite the tremendous progress in physics, especially in the twentieth century, it is perhaps fair to say that Newton still dominates our thinking, although many of his ideas on science and philosophy have been annotated, augmented, developed and modified by later scientists and philosophers.

Now we are coming to the crux of the problem. By about 1830, careful observations and studies, especially by John Herschel and Claude Pouillet, brought into sharp focus the huge amount of energy radiated by the Sun in the form of light and heat. In parallel, the kinetic theory of heat and the ideas of thermodynamics and especially conservation of mass and energy had emerged from the pioneering efforts of Julius Robert Mayer (1814–78), John James Waterston (1811–83), Hermann von Helmholtz (1821–94) and William Thomson, later Lord Kelvin (1824–1907). These developments highlighted the question: what is the mechanism that powers the huge generation of energy from the Sun?

Note that gravitation was the only well understood force in those days. The mass of the Sun (based on Cavendish’s and other measurements of the Newtonian constant G) and its radius were also known to good accuracy. After considering a few possibilities, it was conjectured that the gravitational potential energy of the Sun was the most plausible source. The amount of potential energy released by contracting the Sun by 1 per cent in diameter was found to be sufficient to energise the Sun for 200,000 years! Thus the Sun could radiate at its current rate at most for 20 million years; the Sun could not be older than this.

These calculations and hypotheses did not give scientists any consolation: following the pioneering work of James Hutton of Scotland in the late eighteenth century, there was a growing consensus among geologists and palaeontologists, with Charles Darwin (1809–82) and Thomas Chrowder Chamberlin (1843–1928) being the most eloquent spokesmen, that the age of the Earth was much older, perhaps a billion years or more. This

time was needed for the sedimentary and other geological processes to bring the Earth into its present state, at the current rate of these processes. Similarly, such long timescales were needed for the evolution of species. It looked – especially to Lord Kelvin, one of the authors of the law of energy conservation – as though the energy required for such developments required something like a *perpetuum mobile*. He took refuge in the unknowable as he found it in the preamble written by Joseph Fourier to his *Theory of Heat*:

Mathematical analysis is as extensive as nature itself; it defines all perceptible relations, measures times, spaces, forces, temperatures; this difficult science is formed slowly, but it preserves every principle which it has once acquired; it grows and strengthens itself incessantly in the midst of the many variations and errors of the human mind . . . if the actions of gravity and of heat are exerted in the interior of the earth at depths which will be always inaccessible, mathematical analysis can yet lay hold of the laws of these phenomena. It makes them present measurable, and seems to be a faculty of the human mind destined to supplement the shortness of life and the imperfection of the senses; and what is still remarkable, it follows the same course in the study of all phenomena; it interprets them by the same language, as if to attest the unity and simplicity of the plan of the universe, and to make still more evident that unchangeable order which presides over all natural causes.³

Yet even that statement, which affirms the unknowability of certain fundamental data, nevertheless encourages inference from the known and assured. Lord Kelvin accordingly calculated that even if the Earth started out as a white-hot molten ball, it would have cooled down to the present-day temperatures about 20 million years ago. The cooling theory, apart from giving a very short estimate, could not reproduce the heat flow outwards measured deep underground. Attempts to provide heat generation deep inside the Earth gravitationally by redistribution of mass did not provide sufficient power to keep the Earth warm for a billion years or more, as conjectured by the geologists and biologists. On the other hand, the short lifespan for the Earth was quite consistent with the short

estimate of the age of the Sun. In the ensuing polemics between the physicists, led by Lord Kelvin on the one side, and the geologists and biologists on the other, the real issue became obscured: the deep concern of physicists was the second law of thermodynamics – but without a source of energy the geological processes could not go on indefinitely, not at least for a billion years.

III. Beginnings of the modern perspective

At this point, Lord Kelvin noted in his lecture delivered at the Royal Institution on 27 April 1900 his famous ‘two clouds on the horizon of physics’ (see further pp. 11, 30), the two developments in physics that could not, so far as he could see, be accounted for within the framework of Newtonian physics that had so far prevailed – the spectrum of black body radiation and the constancy of the speed of light. Röntgen had discovered X-rays in 1895, and this was soon followed in 1896 by Henri Becquerel with his discovery of radioactivity. The statistical approach to thermodynamics – the kinetic theory – could not reproduce correctly the spectrum of thermal radiation emitted by a black body, nor explain correctly the specific heats of polyatomic gases. Secondly, the ether that was supposed to pervade all of space, a concept that had influenced the thinking of physicists ever since Descartes formalised it, was put in serious question by the experiments of Michelson and Morley, who showed that the velocity of light was a constant independent of the speed of motion of its source. It is precisely these very developments that were responsible for solving the energy crises not only inside the Earth but also, more importantly, in the Sun.

Putting the matter as briefly as possible, the theoretical problems of explaining the spectrum of black body radiation was solved by Max Planck, who postulated that light was emitted and absorbed in discrete units of energy called quanta. In subsequent developments this gave rise to the quantum theory and quantum mechanics, under the influence of Niels Bohr, Einstein, Schrödinger, Heisenberg and many others. The studies of radioactivity developed into nuclear physics: atoms were modelled with

a massive and highly condensed nucleus surrounded by a swarm of electrons, the nucleus itself being made up of protons and neutrons. Michelson's measurements of the speed of light supported the development of the Special Theory of Relativity by Einstein. Amongst various aspects of this theory the equivalence of mass and energy and their inter-convertibility with $E=mc^2$ is of particular relevance to the puzzle of energy generation in the Sun. Let us return to our main theme after this very brief aside, which only hinted at, but hardly did any justice to, one of the greatest epochs of human intellectual endeavour.

In the month of March 1903, Pierre Curie and Albert Laborde announced the discovery that radioactive materials release heat. Thus a new source of energy was discovered, which had a direct impact on our estimates of the age of the Earth and indirectly led to the understanding of the energy generation in the Sun. This announcement thus confirmed in calorific terms the earlier discovery of Ernest Rutherford and Frederick Soddy that the alpha particles emitted in radioactive decay carry an enormous amount of energy. It is interesting to note that the subject of nuclear geochronology was born in the spring of 1904 in St Louis when Rutherford presented his estimate of the minimum age of the Earth as being 40 million years, based on the accumulation of helium gas (whose nucleus is the alpha-particle) in uranium-bearing minerals. Soon thereafter he was visiting England to deliver a lecture on this finding at Royal Institution. It is telling to recount here his own reminiscences of the lecture:

I came into the room, which was half dark, and presently spotted Lord Kelvin in the audience and realized that I was in for trouble at the last part of the speech dealing with the age of the Earth, where my views conflicted with his. To my relief, Kelvin fell fast asleep, but as I came to the important point, I saw the old bird sit up, open an eye and cock a baleful glance at me! Then a sudden inspiration came, and I said Lord Kelvin had limited the age of the Earth, *provided no new source of heat was discovered*. That prophetic utterance refers to what we are now considering tonight, radium! Behold! The old boy beamed upon me.

. . . The discovery of the radioactive elements, which in their disintegration liberate enormous amounts of energy, thus increases the possible

limit of the duration of life on this planet, and allows the time claimed by the geologist and biologist for the process of evolution.⁴

Thus we had the answer to the prescient question posed by the American geologist Chamberlin in 1899:

The [Kelvin–Helmholtz] theory takes no account of latent and occluded energies of an atomic and ultra-atomic nature. . . . Are we quite sure we have yet probed the bottom of the sources of energy and are able to measure even roughly its sum total?⁵

Thereafter the solution to the problem of energy generation in the Sun evolved rapidly. First, Rutherford and others noted that the amount of uranium and thorium in the Sun was so little that it made a negligible contribution to the energy budget. Arthur Stanley Eddington followed up the suggestion in 1904 by James Jeans that an enormous amount of energy could be derived from the ‘annihilation of matter’ and showed that lighter elements were probably consumed first (because of the Coulomb barrier). We have to credit William Draper Harkins (1873–1951) for hitting upon the right idea regarding the energy generation in the Sun. Making reference to Einstein’s mass-energy relation, $E=mc^2$, he suggested that a huge amount of energy was released when four hydrogen atoms are combined to form helium. Similar ideas about fusion of helium from hydrogen were enunciated some years later by Jean Perrin (1870–1942) and by Eddington with increasing clarity and precision.

As our understanding of the elemental composition of the Sun and the theoretical tools for studying the stellar structure developed, the findings of nuclear physics could be applied to develop an acceptable model for the energy generation in the Sun. The main players in this endeavour were George Gamow, Edward Teller, Louis Chritchfield, Carl Friedrich von Weizsäcker, Hans Bethe, Chandrasekhar, and many more. Among the various ways of synthesising helium, the p-p-chain gave the correct energy generation rate in self-consistent stellar models of the Sun.⁶ Also, with improved nuclear dating methods, a complete and clear picture of the birth of the solar system emerged, with an age of 4.57 billion years.⁷

IV. *The solution and the frustration*

Why then, with such a successful theory of the solar system on hand, did physicists continue to be troubled by the solar problem? To understand this, we need to note that it was in the year 1938 that the mechanism for the nuclear energy generation was put forward, when the existence of the neutrino was merely a conjecture, advanced by Pauli in 1930. The experimental proof that indeed such a particle existed came only in 1956, after a formidable effort by Cowan and Reines. Until this time, and in fact for nearly a further decade, it was not thought possible to launch an experiment that could try to detect the neutrinos coming from the nuclear fusion reactions taking place in the core of the Sun. Was the theory of energy generation in the Sun and in the stars ever to remain in the domain of plausible conjecture but essentially unknowable, or was there any way in which these neutrinos could be detected?

The tension of unknowability and conjecture lay in the simple and off-quoted remark that ‘physics is an observational science’. Karl Popper has stated this with remarkable clarity: for a theory to be deemed truly scientific, it should in principle be falsifiable by experiments and observation. ‘Confirming evidence . . . means that it can be presented as a serious but unsuccessful attempt to falsify the theory.’⁸ It is not that scientists necessarily gave much thought to Popper’s exacting demands set forth in his *Conjectures and Refutations*, or to the broader considerations of ‘epistemic justification’ summarised in John Bowker’s *The Sacred Neuron*.⁹ It is just that the direct confrontation of the ideas of energy generation in stars with experiment appeared to be extremely remote – perhaps unknowable in that sense: the Sun’s radius is about 100 times that of the Earth and its mean density is not too different. The nuclear fusion reactions are postulated by the theory to occur at the very core of the Sun at temperatures of ~10 million degrees Kelvin. They are thus surrounded by about a billion metres of stellar material. When we often feel that we cannot tell what lies behind a brick wall, what hope do we have in testing in any convincing way the details of the postulated nuclear reactions when they are surrounded by enormous amounts of stellar material? Is this the point that the shift is made from the unknown to the unknowable?

It is to the credit of the scientific community that they approached this problem of testing their theory of solar energy generation with humility, perseverance and intellectual honesty. The thread of reasoning that finally allowed physicists to test the theories of the generation of solar energy extends back to another 'energy crisis' in physics. By the year 1930, it had been established beyond doubt that the β -rays emitted by radioactive materials had a continuous energy spectrum. This was grossly contradictory to the expectation that when a nucleus emits just an electron it should have a unique energy, as was noted for alpha particles emitted in radioactive decay. Scientists had started wondering if the principle of energy conservation was indeed so sacrosanct that it was valid even in the subatomic domain. Could it not be possible that at those scales the energy conservation became not exact but only statistical?

Physicists were very reluctant to give up the principle of energy conservation, which had served them so well. The problem was solved by Wolfgang Pauli, who cut the Gordian knot in 1930 when he stated that there could exist within the nuclei electrically neutral particles which have a spin $1/2$ and obey the exclusion principle; they are emitted along with the beta particles. In one splendid stroke Pauli had solved the problem not only of energy conservation but also of the conservation of angular momentum and the spin-statistics interrelationship. Such a particle could carry away the missing energy, so that the sum of the energies of this particle and the beta ray add up to the unique energy available for the decay.

He went on to state further that these particles differ from light quanta in that they do not travel with the velocity of light (possessing a small but finite rest mass). This suggestion was taken up by Enrico Fermi, who called this particle a 'neutrino' and incorporated it into his highly successful theory of beta-decay. Soon after the proposal of the theory of beta-decay by Fermi, Peierls and Bethe calculated that the typical cross-section for the scattering of neutrinos on matter was $\sim 10^{-44} \text{cm}^2/\text{nucleon}$. This extremely low interaction strength means that neutrinos possess phenomenal penetrating power. Produced in nuclear reactions, they can escape from the very core of the Sun with entirely negligible depletion in intensity. Indeed, it is easy to show that the intensity of these neutrinos will be reduced to

only half its original value even after traversing a lead block of one light year in thickness.

Thus we can test the models of solar energy production if we can measure the intensity of the emitted neutrinos. This challenge was first taken up by Raymond Davis Jr, who sought to look for the transmutation of ^{37}Cl into ^{37}Ar induced by the flux of solar neutrinos; the ^{37}Ar was to be detected by its inverse beta-decay reaction (electron capture). Even though the interaction probability of neutrinos is extremely small, by having a very large amount of chlorine in the target material (670 tons of $\text{C}_2\text{Cl}_4 \sim 2 \times 10^{30}$ atoms of chlorine) and waiting for sufficient amount of time ($\sim \text{month} \sim 3 \times 10^6$ seconds) the generation of several atoms of ^{37}Ar by the high energy tail of the solar neutrino flux could be detected.

He and his team were challenged but undaunted by the hard task of collecting a few atoms of the radioactive ^{37}Ar from such a large volume of C_2Cl_4 fluid (kept in tanks deep underground to shield them from cosmic rays). John Bahcall and other scientists took up the challenge of calculating as accurately as possible the expected spectrum of the neutrino fluxes. After decades of experimentation Davis repeatedly found that the observed fluxes of neutrinos fell considerably short of the expectations. Only about a third of the theoretically predicted flux was actually seen in the experiment.

What a disappointment! Might this after all prove to be the boundary of the unknowable? Three new experiments were being commissioned by major international collaborations involving literally thousands of scientists and engineers. The aim of two of the experiments was to observe the lower energy pp- neutrinos ($E \leq 420$ keV), and the third experiment in Kamioka (Japan) was to observe the directionality of the high-energy neutrinos, to ensure that the predicted neutrino flux was indeed emanating from the Sun. Another two decades of research resulted in a startling confirmation of the findings of the chlorine experiments of Davis and others – the flux of neutrinos detected fell considerably short of the theoretical predictions.

V. The final confirmation

What was wrong? Was it that our understanding of the internal constitution and structure of the Sun was at fault, or our understanding of the neutrino? The resolution to this paradox goes back to the 1930s. Whereas it was Homi Bhabha who in the late 1930s suggested the existence of a new particle – a massive electron (later called the muon) and also showed that the Yukawa particle (the pion) would suffer beta-decay, it was Bruno Pontecorvo who first discussed in 1957 whether the neutrino emitted with the muon in pion decay ($\nu\text{-}\mu$) was the same particle as, or different from, that emitted in the beta-decay of the nuclei ($\nu\text{-}e$). Pontecorvo further argued, in analogy with the K_S , K_L oscillations discussed by Gell-Mann and Pais, that neutrinos of the electron and muon flavours could oscillate between these two flavour states if they had a finite mass.¹⁰ These oscillations are a subtle consequence of the superposition principle in quantum mechanics. Setting aside for the present a full description of this effect, we may just note that this oscillation induces the electron-neutrinos emitted by the Sun to slowly transmogrify into the muon kind, and back and forth, as they propagate from the Sun towards the Earth.

Further detail to this theory was added by Mikhaev, Smirnov and Wolfenstein who noted about two decades ago in the 1980s that this transformation of the solar electron neutrinos into the muon kind was aided in a dramatic way by their propagation through the solar material having an outward density gradient. Since all the experiments on solar neutrinos carried out thus far were sensitive only to the electron-neutrinos, the smaller fluxes could be understood by assuming that the missing fraction escaped detection as they had been transformed into muon-neutrinos which could not be detected by the ongoing experiments which were all specifically designed to look for electron-neutrinos.

In a parallel development, solar astrophysicists noted that sound waves could penetrate deep into the Sun, and by measuring the velocity fields induced on the solar surface by the sound waves bouncing around within the Sun, its structure could be determined. The velocity fields on the solar surface were really small – less than 0.1 metre per second – and it was a challenge to measure them and find their frequency spectra and invert the

data to determine the internal structure of the Sun. A network of stations all across the globe was needed to observe the Sun continuously without break so that the solar oscillation frequencies could be determined unambiguously. Alternatively, observations could also be made from space unhindered by the nightfall that would cut short the observation from any single station on the Earth. Again, major international efforts were launched, and to the great satisfaction of everyone concerned, the validity of astrophysical solar models was proved to about one part in a thousand. When the precise neutrino fluxes were calculated using these accurately measured solar profiles and the theory of neutrino oscillations proposed by Mikhaev, Smirnov and Wolfenstein were applied to correct the expected fluxes of the neutrinos of electron flavour at the Earth, then results of the neutrino experiments could be reproduced, including the substantial depletion in the fluxes of the electron neutrinos observed at the Earth.

But this was not the end of the story. A modern version of the Fermi theory of beta-decay developed by Salam, Weinberg and Glashow (c. 1967) to unify electromagnetism with weak interactions indicated a possible way of proving that the missing fraction of electron-neutrinos from the Sun indeed ended up as neutrinos of another flavour. The modern theory had shown that all neutrinos irrespective of their flavour will interact with nuclei (through 'neutral current') and will also elastically scatter off electrons in the target material. A major collaboration was forged to study these interactions, using heavy water as the target. The deuteron in the heavy water would be dissociated by the interactions of neutrinos of all flavours and could be measured well using the capture reactions of the neutron released in the dissociation.

This experiment, involving about a million kilograms of heavy water, was set up in a mine at Sudbury in Canada. The experiment measured with unprecedented accuracy the fluxes of the electron-neutrinos and the total fluxes of all the neutrinos of all flavours, both of which agreed well with the theory, thus supporting not only the solar models but also the theories describing the particle physics of the neutrinos.

Finally, it is worth noting that a direct consequence of the particle physics of the oscillating neutrino predicts precisely the rate of disappearance of anti-electron-neutrinos as they propagate through space. A

dedicated effort to observe such a disappearance of anti-neutrinos emitted from nuclear power reactors in Japan has confirmed unambiguously the theoretical predictions.

In all this excitement, the mundane problem of explaining the heat flux of the Earth and its longevity was not forgotten. The same experiment (KamLAND) that measured the disappearance of the reactor anti-neutrinos also measured the flux of anti-neutrinos of the electron kind emitted through beta-decay of the radioactive nuclei ^{238}U and ^{232}Th present in the Earth. The measured heat flow from the Earth is ~ 30 TW, out of which about 20 TW is estimated to be due to radioactive decay of various nuclei present in the Earth. A substantial fraction of this, nearly 85 per cent, is due to ^{238}U and ^{232}Th . Measuring the correct flux thus solves the age-old problem related to Earth's longevity of ~ 4.6 billion years – the radioactivity contributes importantly to the heat flow and the fraction increases at earlier epochs. It is hard to find a better example in all of science of the humble and dedicated efforts launched by generations of scientists to know that which at various moments seemed to be completely unknowable. It was only by persisting with the apparently unknowable that the mystery of apparent energy non-conservation was solved, through a confluence of several branches of natural philosophy.

VI. Summary

We are now ready for the dénouement and have come to the end of the saga (which is perhaps the beginning of the next adventure). We began with the three challenges to the principle of conservation of energy, which were the focus of scientific investigation from the beginning of the twentieth century: 1. The longevity of the Earth, its heat efflux, and the source of energy to power the geological processes and the evolution of the species, over billions of years. 2. The source of energy that powers the prodigious amount of light and heat radiated by the Sun which must last at least as long, if not longer, than the time-scales set by the study of geological processes and evolution of species. 3. The missing energy in radioactive decay of a nucleus, accompanied by the emission of a beta ray.

In the beginnings of the twentieth century there was no idea as to how these three issues would be resolved or expectation that they would be resolved at all. We are very fortunate now to witness the unravelling of these three mysteries to the satisfaction of the most demanding devil's advocate. And what is more, the three apparently disconnected questions are seen to bear an intimate interrelationship that provides insights into the subtler aspects of each one of them. Take first item 3, the missing energy in beta-decay. We saw that Pauli resolved the issue with the hypothesis that a hitherto undiscovered particle, neutrino, exists and carries away the missing energy. It took a quarter-century after this suggestion to actually detect this highly penetrating and weakly interacting particle. It took another quarter-century still to discover that there are indeed three different 'flavours' of neutrinos. Conjectures that neutrinos have mass¹¹ and that the different flavours of neutrinos might oscillate one into the others during propagation¹² took about half a century to be confirmed by experiments.

These experiments were motivated by the need to understand in precise terms the process that leads to the generation of energy in the Sun (the second item listed). These experiments not only confirmed the details of the nuclear fusion reactions taking place in the Sun but also, at the same time took us beyond the 'Standard Model' of particle physics by revealing that the neutrinos indeed have a mass. And, finally, the magnificent apparatus built to measure the solar neutrino fluxes also measured the fluxes of anti-neutrinos emitted by the radioactivity of the Earth. This observation shows that about half the heat energy dissipated by the Earth is radiogenic in origin, thereby confirming the expectation of the present-day geophysical models. The cooling of the Earth through long geological periods is now well understood in terms of increased levels of radioactivity in the past and rests on good experimental evidence. Thus the three puzzles faced by physicists for a century or more have all been resolved. This new knowledge has important implications for the physics of elementary particles beyond the Standard Model, and to Cosmology. The saga of experimental observations and theoretical model building, which we have reviewed briefly in this chapter, constitute one of science's finest examples that highlights its continuity, connectivity and systematic progress.

VII. Epilogue

In closing, I would like to point to a new trend in the conduct of science. This stems essentially from two underlying causes. First, developments during the twentieth century have progressively uncovered deep interconnections amongst various branches of science – physics, cosmology, biology and so on. Thus developments in one field of study may impact in a very fundamental way on the development of another. For example, the purely intellectual effort to understand the various fundamental forces from a unified perspective – electroweak unification, to be precise – gave rise to the discovery of neutral currents in weak interactions and thus provided the basis for confirming the emission of neutrinos from the Sun with the correct intensity, nearly thirty-five years later after the original theoretical effort. Thus the interconnections channel the understanding developed in one field to bear on outstanding questions in another, however unanticipated they might have been to start with.

Closely related to this is the second tendency in science: collaborations of literally hundreds or even thousands of scientists to tackle outstanding problems in science have become the order of the day. Sometimes the sheer enormity of the task, such as mapping the human genome, requires such large numbers. But equally often we find that the diversity of scientific expertise and engineering skills needed for the enterprise forges such collaborations. It may not be given to each one of us to spearhead such great movements, but nothing stops us from being a gentle witness to the weaving of the tapestry of knowledge.

Acknowledgement

It is a pleasure to acknowledge several discussions with Professor Thomas J. Bernatowicz and Michael W. Friedlander.

Notes

- 1 See S. N. Ahmed *et al.*, 'Measurement of the Total Active ^8B Solar Neutrino Flux at the Sudbury Neutrino Observatory with Enhanced Neutral Current Sensitivity', *Physical Review Letters*, 92, 181–301 (2004) and T. Araki *et al.*, 'Experimental Investigation of Geologically Produced Antineutrinos with KamLAND,' *Nature*, 436, 499 (2005).
- 2 See Isaac Newton, *Mathematical Principles of Natural Philosophy*, trans. Andrew Motte (Berkeley, CA: University of California Press, 1946; [London, 1729]), Book 3, p. 398.
- 3 See J. B. Joseph Fourier, *Theorie analytique de la chaleur*, trans. Alexander Freeman as *Analytical Theory of Heat* (New York: Dover Publications; repr. of 1878, 1955), p. 7, ff.
- 4 J. D. Burchfield, *Lord Kelvin and the Age of the Earth* (London: Macmillan, 1975), p. 164.
- 5 T. C. Chamberlin, 'Lord Kelvin's Address on the Age of the Earth as an Abode Fitted for Life', *Science* (July 1899): 11–18.
- 6 See J-L. Tassoul and M. Tassoul, *A Concise History of Solar and Stellar Physics* (Princeton: Princeton University Press, 2004).
- 7 See C. T. Harper, ed., *Geology Radiometric Dating of Rocks and Minerals* (Stroudsburg, PA: Dowden, Hutchinson & Ross, 1973).
- 8 K. R. Popper, *Conjectures and Refutations: The Growth of Scientific Knowledge* (New York: Harper Torchbooks, 1965), p. 36.
- 9 See J. Bowker, *The Sacred Neuron* (London: I.B.Tauris, 2005).
- 10 See B. Pontecorvo, *Zh. Eksp. Teor. Fiz.* 33 (1957), 549 and *Zh. Eksp. Teor. Fiz.* 34 (1958), p. 247.
- 11 See R. Cowsik and J. McClelland, 'An Upper Limit on the Neutrino Rest Mass', *Physical Review Letters*, 29/10 (September 1972): 669 and 'Gravity of Neutrinos of Non-Zero Mass in Astrophysics', *Astrophysical Journal*, 180 (1973): 7.
- 12 See Pontecorvo, *Zh. Eksp. Teor. Fiz.* (1957) and (1958).

From the Unknowability of the Universe to the Teleology of Reason: A Phenomenological Insight into Apophatic Cosmology

Alexei V. Nesteruk

I cannot really stand aside from the universe, even in thought. Only by a meaningless pretence can I place myself at some vague point outside it, and from thence reproduce on a small scale the successive stages of its genesis. Nor can I place myself outside myself . . . and question myself upon my own genesis. I mean of course the genesis of my non-empirical, or metaphysical reality. *The problem of the genesis of the I and of the genesis of the universe are just one and the same problem*, or, more exactly, one and the same *insoluble*, the insolubility being bound up with my very position, my existence, and the radical metaphysical fact of that existence.¹

Gabriel Marcel

The identity of the universe and its unknowability

The issue discussed in this chapter is that of the knowability and unknowability of the universe in modern cosmology and its connection with the problem of the origin of human subjectivity.

It is obvious that theoretical cosmology has to work in conditions where its subject matter, namely, the *universe as a whole*, cannot be subjected to any empirical observation. This leaves a cosmologist with a mysterious feeling that there are various appearances of the universe, but the identity of the universe as the unity of all its sensible and intelligible appearances

is not available to a scientist in a way similar to identities of other empirical things. The identity of an ordinary object is formed through the object's presence and absence to a particular consciousness, so that the object appears in its identity as the unity of its profiles and impressions available to the public mind.

One particular feature of constituting identity is that it can be formed through consciousness of its sheer absence, that is, its non-existence. For example, one appreciates the beauty of a flower in the context of created contingency, without clear understanding as to why this particular kind of beauty was created and who could appreciate it if anyone were not to be there. One anticipates here that the very identity of this flower implicitly occupies our consciousness either from the perspective of its possible non-existence (absence in absence) or in terms of our non-existence.

The same is true with respect to another human being: we identify this being as finite, and mentally and emotionally homogeneous with us. The distinctiveness of 'me' from 'him' is determined by the multitude of human beings who are all different. Thus the synthesis of one's identity ultimately originates in relationship, which, implicitly, in reflection, allows one's non-existence. The anticipation of the identity of the other constitutes one's own identity. The disappearance of the other from the horizon of one's life thus affects one's own identity. However, it is extremely difficult to achieve a clear consciousness of one's own absence from itself, that is, non-existence of itself. Even the intending of this strange condition is intrinsically contradictory and cannot be entirely empty: it still contains the presence of one's subjectivity. A similar thing happens in cosmology, where any attempt to think of the universe as non-existent is intrinsically contradictory, for it eliminates that same consciousness which thinks of the universe.

From this it is clear that it is necessary to discuss in detail the notion of the identity of the universe as different from the identity of ordinary objects. First of all, what does one mean by the universe in a mundane, non-theoretical sense? One can give an allegorical description of the universe as a picture which we observe while looking at the surface of the two-dimensional heavenly sphere from within. The universe then is that totality of heavenly objects which we see in the sky, plus, of course,

a finite three-dimensional world of our planet extended by cosmic travels in the solar system. The universe is reaching us through optical images in telescopes and radio signals in receivers, through counting devices in cosmic particle chambers, and so on. So, the universe is the manifold of different sense impressions which come from the sky, synthesised in the human mind.

However, cosmology as a science, about the structure and origin of the universe, aims to see the universe not only as a manifold of observations and facts but as a single coherent physical unity which possesses some intrinsic logic, present behind the variety of astronomical facts. The underlying tendency in all speculations about the universe implies a philosophical attitude, namely, to secure the reality of the identity of the universe by bringing out the fact that it is different from its manifold presentations and showing that, despite its slippery status, it is truly a component of what we experience. In the language of phenomenology one can say that, indeed, the universe is presented to us, that is, *present* through its 'pieces' and 'moments', but the identity of the universe is *absent*, so that we deal here with a situation of 'presence in absence'.

The incessant search for the *unity* of the universe forms in the cosmologist's mind the intuition of its *identity* as that cosmic whole, as yet unknown and unavailable, which stands face to face with hypostatic human subjectivity. Thus the very idea about the identity of the universe originates in human beings, who understand that the universe is not an object that can be posited in the background of human facticity, and that the universe can only be contemplated through communion and participation, as an immediate and direct experience of belonging *to* and unity *with* the universe, the experience of which can hardly be verbalised and explained.² The universe cannot be an object because it cannot be removed from human experience; its hypothetical removal would imply the removal of the incarnate consciousness itself (in a sense that its intentionality directs and belongs to the universe), which is a sheer impossibility and can be considered only as an imaginative intuition, which by no means is able to deny its own facticity.

Thus, the very mode of conscious life implies communion with the universe. This communion, as the immanence of the universe to humans,

is drastically different from the view of scientific cosmology which considers the universe as a composite of different eras, domains and ingredients, that is, as a structured and complex system which in its spatial and temporal vastness dominates with its 'realms' of the non-existential and non-human.³ Thus one can characterise the identity of the universe as the en-hypostasised facticity of our communion with the universe, the whole of reality. The identity of the universe is that immanence of the field of consciousness in the background of which all moments and pieces of the universe are articulated.

Certainly the identity of the universe in its noetic aspect, being a form of personal (hypostatic) communion, is not available to any rational and hence anonymous and impersonal grasp. However, the unavoidable fact for every hypostatic consciousness is that this identity as communion is present in every conscious being. Thus one can argue that there is the transcendental, noematic analogue of this identity, which, using the terminology of Husserl, one could qualify as an attribute of the life-world, understood as a sphere of immediate indwelling of humanity.⁴ The very presence of the identity of the universe in human consciousness reflects the consubstantiality of all humanity and the universe, which, in its noetic essence, is fundamentally multi-hypostatic.

The difficulty of science lies exactly here: it cannot deal with the multi-hypostacity of knowledge and experience (that is individual histories and temporalities) and, therefore, attempts to annihilate it by reducing the varieties of en-hypostasised identities of the universe to a kind of objective and graspable, although impersonal, representation. This is exactly what is attempted in Big Bang cosmology.

Physics and mathematics approach the lack of empirical evidence for the identity of the universe by invoking a faculty of imagination and extrapolating sensible images of reality here and now through space and ages, summarising them in a kind of unity, which is intended by cosmologists to be potentially graspable. For example, according to modern cosmology we can observe only that part of the universe which, in terms of space, is covered by the amount of light years multiplied by the age of the universe (10–15 billion light years = 10^{28} cm). In fact, modern observational cosmology deals only with that part of the universe which

became transparent after the decoupling of radiation and matter, so that the actual size of what is observed is reduced further to 10^{25} cm.

However, there is an idea, at the back of a cosmologist's mind, that there must be some large-scale integrity of the universe beyond the observable cosmos which, not being immediately accessible to observations, somehow shows itself. Such a universe is seen as the totality and unity of space and time filled with a uniform 'cosmological fluid' (made, for example, of clusters of galaxies), so that some geometrical images can be used in order to provide us with an allegory of the unity of the universe.

One must make it clear, however, that the representation of the universe as a whole implies a particular assumption, known as a 'cosmological principle', which postulates the uniformity of the universe in space, as if one could verify this postulate by repositioning oneself from one point to another. It is here that the human mind exercises its ability to displace itself in a kind of intelligible space in order to stretch its consciousness across the whole universe, which is 'seen' not only as the *intelligible* entity but also as the *intelligent* entity (for example, as a multiplicity of potentially possible but undifferentiated observers).

Yet this displacement implies the loss of hypostasis, because this extended cosmic intelligence functions as disembodied and anonymous; this is the reason why the sought identity escapes a cosmologist's catch once again: it is 'present' as a banal intuition of the uniformity of all spatial pieces and ages of the universe as well as an imaginative extension of consciousness beyond its incarnate presence on earth.

Under the above assumptions and in spite of the philosophical inevitability of not reaching the identity of the universe, some cosmological theories pretend to model and give an image to this identity. For example, if the universe is thought to be closed and finite in space and time, it is depicted as a curvilinear cylinder with two apexes symbolising Big Bang and Big Crunch.

It is in this act of creative imagination that the universe acquires a kind of identity as being 'created' by consciousness: here the identity of an image supposed to originate from the identity of an 'artist' who produced this image. But the image of the universe as a curvilinear cylinder is an anonymous geometrical shape, created intentionally for sharing within the

scientific communion, which does not bear any signs of personhood. That is why this image has a sense of an *apophatic* identity: it tells us what the identity of the universe *is not*, and this is the negative reason why this image is valuable. It allows us to differentiate between the ever mutable results of eidetic reductions of the empirical and that intrinsic sense of immanence and participation with being (which is similar to the internal time-consciousness), which cannot be excluded (reduced) from subjectivity at all. Thus the identity of the universe, in an ill-articulated sense of our consubstantiality with it, is *present in its sheer absence*.

A cosmological mind attempts to transform the *presence in absence* of the identity of the universe into its sheer presence, as if it were available in a way similar to ordinary objects. In so doing it transcends the facticity of the empirical and creates an image of the universe as a whole by using geometrical ideas and physical extrapolations.

The origin of the universe as its identity?

Cosmological research, as well as scientific discourse in general, feel extremely uncomfortable with respect to their inability to give account of the facticity of different conscious persons. The anthropic principle in cosmology attempts to link the natural conditions of human embodiment with the fundamental physical parameters which are responsible for the stability and actual display of the physical universe. However, what are articulated here are the natural, biological conditions of human existence. The anthropic inference makes a nearly trivial observation that, indeed, there is the underlying consubstantiality between human observers and the universe expressed in some particular technical terms. But even in this case, the very facticity of this consubstantiality, as it is reflected in human consciousness, its particular contingent noetico-noematic givenness, is not accounted for, and probably cannot be accounted for at all. But it is this very facticity that is ontologically responsible for the multi-hypostatic incarnations of humanity, which cannot be simply reduced to the natural. And it is these particular contingent realisations of anonymous and impersonal physical laws in human persons that disturb all scientists and

cosmologists, who are eager to dismiss any trace of them under the suspicion of non-scientific 'subjectivity'.⁵

Here we clearly see the link between the problem of the facticity of the multi-hypostatic human consciousness and the facticity of the universe. Indeed, since all consciousness is intentional, the primary object of this intention is the world in which this consciousness indwells. But consciousness, in its contingency, acts as the nominative of disclosure and dative of manifestation, so that the world, disclosed and constituted, is contingent in its immanence with consciousness. Hence, in the same way that anthropology and psychology cannot tackle the problem of hypostatic existence (thus manifesting its apophatic value), cosmology cannot adequately approach the problem of the identity of the universe as its nominated 'name', that is, the 'name' of its facticity (being thus also an intrinsically apophatic enterprise).

Cosmology, however, cannot come to terms with this simple conclusion, and it persistently attempts to unveil the ultimate mystery of the universe (that is, to explain away its contingent facticity) by referring to the initial conditions in the universe. Cosmology sincerely believes that by inventing the initial conditions of the evolving universe which lead to the displayed state of affairs, it will solve naturalistically the mystery of its multivariied facticity (including multi-hypostatic incarnate humanity).

This is the reason why, in many aspects, the question about the identity of the universe, as it is understood in cosmology, is linked to the question of its origin. In other words, the reinterpretation is attempted of the contingent facticity of the universe, as a given display of its various aspects here and now, in terms of a certain temporal origin (in the remote past of the universe), in which the undifferentiated 'substance' was 'set up' in such a state as to evolve into the visible universe. The procedure of 'naming' this initial state is supposed to play the role of disclosing the universe's identity and hence is a disguised name of its present facticity. It is clear, however, that the problem of contingent facticity of the universe cannot be explained at all, because there is no way to explain away the very contingency of the initial conditions.

In this undertaking we see an interesting transformation of the whole issue of the 'presence in absence' with respect to the universe's identity:

because cosmology cannot overcome this dichotomy of the presence in absence in terms of the present-day perception of the observed universe, it reverts the whole problem to the allegedly existing past, where the empirical variety of the universe, being reduced to a single description, allegedly acquires its 'simple name' (cosmological singularity, Big Bang), 'present in presence', although in a purely intelligible, eidetic sense, belonging thus to an impersonal collective of scientific individuals who transfer their convictions to a wider audience.

But this shift of the sense of the identity of the universe implies a price to pay: the idea of the Big Bang, as a short-hand form of talking about the beginning of the universe, acquires a status of an intelligible entity, an Idea (in a Platonic or Kantian sense) belonging to the disembodied and impersonal transcendental subjectivity. The 'presence in presence' of the Big Bang where all is supposed to be in the undifferentiated all, as an ideal of cosmological knowledge, implies the elimination of the sense of 'presence in absence' of the personalised mystery of facticity of the human being-in-the-universe.

We now need to recall two attempts to speak scientifically about the Big Bang. Both of them will manifest the transcendent move in cosmology towards the hidden identity of the universe, involving attempts to know the unknowable by means of mathematical inference.

The first attempt is a famous idea of Stephen Hawking that the universe in the so-called past was in a quantum state and effectively did not have any point of origination. The universe was in a space-like state where all temporality, associated with the flux of time and irreversibility, was suspended.⁶ In this sense the universe existed for ever and its contemporary phase is just a special transition from a quantum universe to the classical one. The identity of the universe in this case is associated with its special 'no-boundary' state.⁷

A philosophical mind certainly observes here an element of transcendence towards the unknown and fundamentally untestable.⁸ However, scientists (as well as philosophers and theologians) were very much impressed by this model of the universe, because, in a way, the issue of contingency of its *temporal creation* (not creation in a sense of *ex nihilo*) was 'explained away'. In fact, when we use the word 'transcendence' in

application to this model, we mean a transcendence of the empirical (in a sense of eidetic reduction). By no means does it imply transcendence in a theological sense; for the facticity of the very 'initial conditions' of the universe, that is, the pre-existence of space, was not addressed, so that genuine transcendence has not been achieved.⁹ What is important, however, is that the scientific mind exercises a typical trick by attempting to explain what it existentially intends from within the empirical, by means of purely non-existential mathematical ideas.

The second attempt reveals a similar situation: this is another scenario of the initial conditions, based on a famous conjecture of Roger Penrose about the low-entropy condition at the Big Bang, which is responsible for the observed display of irreversibility in the universe.¹⁰ His scenario is Platonically oriented, for in order to interpret the specificity of the initial conditions in our universe (and hence its facticity), Penrose makes his inference from the fundamentally non-observable but imaginatively and conceptually existing ensemble of universes with different initial conditions. Then the choice of the particular initial condition corresponding to our universe is made by a hypothetical mechanism, interpreted by Penrose himself as 'creator's' choice, and mathematically described as the Weyl Curvature Hypothesis.¹¹

We observe here again a similar shift in reasoning about the unknown by displacing oneself into the conceptual space of mathematics where all sorts of scientific imagination are possible. Whether this imagination leads to any fulfilment of its intention is an open question. But heuristically this kind of explanation creates a feeling of satisfaction in some scientists that the observed facticity of the universe, in its intrinsic contingency, is explained away and referred to the realm of intelligible necessity, which is rather the domain where philosophy and even theology may have their say.¹²

Coherence in cosmology as its apophaticism

It is remarkable, however, that in spite of the evidently speculative nature of all hypotheses about the initial conditions of the universe (this is

admitted by cosmologists themselves¹³), the search for models of these conditions is still going on. Here one can detect two underlying motivations: the first being a drive to a coherent and aesthetic approach to the origin of the universe, and the second being identifiable as teleological.

The first motivation is linked to the idea of coherent epistemic justification. It is clear before the beginning of any theoretical quest that the initial conditions cannot be tested, not only because they are separated from us by an unbridgeable gulf of temporal immensity, but also because we cannot transcend this universe in order to 'have a look' at its beginning from 'the outside'. However, cosmologists are very proud that they can speak in nearly priestly terms about the beginning of everything without being caught in fallacious reasoning. This happens because what is dominant in cosmological research is not the principle of correspondence with that empirical reality which constitutes the living world of cosmologists, but, rather, a principle of coherence in justification of some epistemic and theoretical claims.¹⁴

Without any deep recourse to philosophical aspects of coherence theories of justification, some important points can be made here. If cosmology relies on the coherence of its own statements, it is fundamentally enclosed in itself and cannot be assessed from an outside system of thought. Since there is no automatic link between coherence of justification and coherence of truth (which naturally requires breaking out of the system of coherent suppositions), cosmology can create as many theories allegedly explaining the universe as it wants, without even a slight idea whether these theories correspond to truth (except in the closed circle of coherence).

In fact, the question of truth is inappropriate in this context because anybody who is philosophically honest understands in advance that the fullness of truth cannot be grasped through some fragmented theories. All references to correspondence with the available empirical material do not reach their aim, because the process of adjusting theories of the early universe in order to fit observable data is in a state of permanent advance, so that all theories, seen philosophically, seem to be metaphors of the human desire to know the universe. They also manifest a fundamental human incapacity to achieve this goal. In this case the whole pattern of

coherent epistemic inference in cosmology has a sense of belief which attempts to express communion with the universe, and participation in it, and which allegedly removes 'presence in absence' of its totality by sheer presence.

Here it is not difficult to realise the intrinsic apophatic meaning of cosmology, similar to that in theology. In theology, apophaticism implies the wholeness and consistency of religious beliefs in their limitations by what are called dogmas.¹⁵ These dogmas, as Church definitions, are those boundaries of faith (the boundaries of the closed circle of faith) which cannot be demonstrated from outside. Apophaticism intends to proclaim the freedom of expression of faith within its boundaries, that is, within the dogmatic system, if the coherence of this expression with respect to dogmas is observed. Coherence in this case means faithfulness and absence of desire to doubt dogmas. In this case the experience of faith can expand unlimitedly within the boundaries of faith, being coherent with the content of dogmas. Apophaticism reveals itself as a principle of coherence in theology, which stops human reason from vain attempts to treat dogmas as definitions of the essence of God and which guarantees freedom of expressing the experience of God through music (liturgy), poetry, painting, and so forth, if the limits of this experience are observed.

However, apophaticism in theology leads to coherence of truth (i.e., breaks out of the closed circle). Here one reveals the real meaning of apophaticism, not as logical proclamation of truth about God but as participation in this truth through the action of prayer and liturgy. The reality of what the Christian Church teaches in its dogmas cannot survive outside doxological proclamations.¹⁶ Thus the apophatic coherence in theology implies, so to speak, liturgical coherence as the ever-presence of tradition in space and time, that is, in history. Coherentism in theology thus acquires a historical dimension.

It is clear why theological apophaticism makes it necessary to rely on coherence of interpretation in religious matters: God is not an object, he is present in absence; we know that he is with us but we do not know 'what he is'. No theory of correspondence is possible here. However, we affirm God on the basis of our faith in him, that faith which implies the coherence of dogmas, tradition and liturgy. Dogmas, definition and

theological opinions can point towards God, can change our attitude to his presence in absence, but they never qualify God as essence and substance to which one can refer in the mundane sense of empirical evidence.

This means that prayer and liturgy, as genuine means of transcendence, create in theology that breakthrough from the seclusion of its dogmatic system, making thus demonstrable that any theology has no direct sense as a carrier of truth if it does not imply faith and living communion with God. And it is this last element of genuine transcendence which makes theological apophaticism crucially different from the apophaticism in cosmology.

Something similar takes place in cosmology: one can attempt to express the experience of admiration of the forces of the universe through very complicated mathematical theories (a kind of incantation), but all of them will remain no more than symbolic and metaphoric images of that anticipated unity and infinity of the universe which is present in the incarnate human subjectivity. Since there is no empirical access to the Big Bang, all that we express about it by using cosmological theories can be characterised as metaphors and an esoteric symbolism based in the mathematical formalism. The beauty of this symbolism, its coherence, gives us some assurance to believe in the possibility of the Big Bang as a principle of explanation and justification. However the 'truth' of the Big Bang in an ontological sense remains unclear and, what is more important, fundamentally inaccessible. In other words, all cosmological theories give us some symbolic representation of that towards which they aspire, but which will never be known and reached in a sense of truth.

The apophaticism in cosmological research is thus present as the limitation of thought: it wanders around the idea of the Big Bang, but it will never reach it. In this case all competing theories are epistemologically and axiologically equal, but no one can pretend to claim the fullness of truth and the knowability of the Big Bang as that which is intended in a hidden teleology of cosmological knowledge.

Thus all cosmological knowledge is apophatic in the sense of its limited validity determined by the boundaries of the physical, and also because of the open-endedness of the intended horizon and a fundamental inexhaustibility of the truth about the universe by means of discursive thinking.

However, in order to realise this fact, one should place one's consciousness in a philosophical attitude, which is capable of bracketing all theoretical statements about reality and to conceive them as varieties of expression of the human intuition about the entirety and identity of the universe. But this attitude is not simply available to cosmologists themselves. They will never agree with the verdict of philosophy that all eidetic imagination in cosmology, incarnate in complicated formulas, is only a wandering around truth, but not truth itself.

The 'Big Bang' and the phenomenology of birth

Now we are in a position to start discussion of the second motivation (p. 72) that drives cosmological research. In spite of the fact that the past of the universe is available to astronomical observations only to a very limited extent, the idea of some underlying temporal origin of the universe, as if it was in a state of undifferentiated substance, persistently guides cosmological research. In many aspects this search for the origin is rooted in a psychological desire to understand one's own origin,¹⁷ that is, a mystery of one's own biological birth,¹⁸ understood in a philosophical sense as the mystery of hypostatic incarnation.

In the same way that the event of a human being's birth is unavailable to phenomenalisation in consciousness, whereas its phenomenality unfolds while this being constitutes itself in its progression to the future,¹⁹ one can say that in cosmology the origin of the universe (as that background to which one refers in order to understand the present universe) is present only in its actual absence. It follows that all attempts to articulate this origin (as intentions of consciousness being directed to the future) are doomed to deal with the unfolding facticity of the universe (in which the alleged past is encoded) without any hope of achieving the 'presence of the past in presence'.

It is in this sense that the very advance of cosmology towards understanding the past of the universe constantly deals not only with its unknowable essence but also with an unavoidable absence. In other words, in spite of the metaphysical fact that the origin of the universe as well as the

origin of ones' person are radically unavailable to humanity because of the contingency of their facticity,²⁰ cosmology still intends towards the principally unknowable and absent as if it can become knowable and present at some distant future.

Here cosmology exercises not only its tendency to the imagination of the past in mathematical terms but effectively manifests the very essence of the human condition, which can be expressed as the human desire not to be circumscribed by the necessities of nature and the inevitability of the universe's facticity, and to see nature and the universe (and hence imagine them) according to our human will and in our own image.²¹

Thus 'to know thyself' means to know the universe. To know thyself means to understand the indestructible presence of the immanent self-consciousness which is always looking for its own origin, but, failing to find it, this self-consciousness appeals to the idea of infinity as that indefinite medium of totality to which it always desires to refer itself.

Consciousness is always intentional; thus it is immanent to the object of its intention; thus it cannot live without the universe; thus the searched foundation of consciousness, as the ground of its facticity, implies the ground for the universe as the media to which the immanent intentionality is directed. Then, if, in the natural attitude, consciousness thinks of its own origin in temporal terms, the origin of the universe also acquires some features of temporality and this leads to varieties of the Big Bang model. In a complete incapacity to phenomenalise the origin of the incarnate transcendental subjectivity, the mind in the natural attitude physicalises this mystery under the cover of the beginning of the universe.

This suggests that the tendency to search for the origin of the universe is deeply embedded in the human condition, as a kind of an innate idea, donated to every human being at the act of its birth. Theologically this is an idea of the Divine image in Man and an archetype of its lost likeness when Man, like God, knew all because he was 'all in all'.

We can now analyse in more detail the dynamics according to which this innate idea realises itself. When cosmology deals with the so-called past of the universe, a characteristic displacement of the self of cosmologists takes place when they descend by means of scientific meditation into the remote stages of the early universe. The very intentionality of a

cosmologist's consciousness attempts to grasp the meaning of such a condition of the universe where no incarnate conscious life was possible. The more a cosmologist's mind, in its eidetic reduction of the empirical, advances towards the Big Bang, the more it intends something which is fundamentally non-human. By acquiring conceptually the impersonal physical content of the universe, the self, its consciousness, exercises a kind of *empty* intentionality, which will probably never be filled and fulfilled.

From a phenomenological, and even theological, point of view one finds here an incessant urge of the human soul to find the impersonal 'foundation' of the facticity of the world at the expense of losing the sense of uniqueness and identity of every particular human person. On a psychological level one must say that those philosophising cosmologists who believe that through studying the alleged origin of the physical universe they touch upon the sacred truth (which allegedly points towards God), in fact dissolve themselves in the abyss of non-human physics, which, although being a very interesting eidetic exercise, turns out to be devoid of any spiritual and soteriological meaning.

Such a cosmologist begins to predicate the universe in esoteric (mathematical) and non-existential (not having immediate references to the realities of the life-world) language which is accessible only to those who follow this cosmological gnosis. One should add that this cosmological gnosis ignores some obvious philosophical doubts about the ontological universality of its claims and the sheer naivety of its pretension for objectivity based in the natural attitude.

That is why it seems intrinsically paradoxical to claim the objective (physical) status of all sorts of models of the Big Bang (or even different pre-existing universes) where no trace of human intelligence was possible, in conditions when all predications of the universe take place from within such a state of affairs where the incarnate consciousness is not possible.²² A simple epistemological observation of this paradox disappears from cosmologists' insights, cosmologists who sometimes believe that the asserted ultimate reality of the past universe, where all forms of matter were present in a kind of undifferentiated soup, has more relevance to the truth of existence than the variety of mundane experiences and that it is this reality which fills one's life with content and meaning.

One can qualify this movement of thought as the 'lure of cosmos'²³ implicitly driving the cosmological mind in the search for the ultimate cradle of life in the 'cosmic heaven'. It is deeply interwoven with the discomfort and fear of the contingent facticity of everything in the universe, including the very human subjectivity which discloses and articulates the universe. For that carries with it the inevitable transience and mutability of all objects and lives, which tragically contradicts the human desire for all-encompassing knowledge and for a certain immortality of the sense of that which happens here and now. These anxieties of life are implanted in the very facticity of human subjectivity, so that they represent the innate *idea*, or hidden *teleology*, of the human spirit.

In this sense all cosmological speculations are unavoidably linked to the very essence of humanity. However, at this point a question of a theological nature arises about possible realisations of this intrinsic teleology: either to consider the models of the Big Bang as having indeed literal relation to the past of the physical universe (cataphatic cosmology), and which might therefore be 'idolised',²⁴ or alternatively, to treat the Big Bang as an *icon* of something which we do not know and we will never know, but which is given to us through a direct communion with its 'presence in absence' and whose discursive imaging represents one out of many infinite tasks of humanity (apophatic cosmology).

The Big Bang as the telos of cosmological explanation

These questions can best be approached through phenomenology, since it is phenomenology that makes it possible to change the overall attitude to theoretical cosmology and all theories of the beginning of the universe. Phenomenology acts here as that mode of philosophical thinking which unfolds the hidden *teleology of scientific research* and *teleological meaning of some particular scientific ideas*.²⁵ This teleology appears as an endless commitment to a theoretical task (understood philosophically) so that each particular scientific result or theory is considered as temporary and provisional and must be put aside while looking for the successive developments.

Cosmology in this sense is not an exception and represents no more

than a very sophisticated set of eidetic reductions from the empirical. The ultimate existential meaning of cosmology, its own ground as its sheer possibility, can only be understood if cosmology is referred to its roots in human subjectivity (as we have just seen), and if also it is related to the cultural dimensions of the life-world, and thus to the hidden teleology of reason which provokes a cosmological quest as a particular mode of fulfilment of its *telos*.

In this perspective, the persistent exercise by every human mind of that intentionality which is directed towards the removal of the contingent facticity of everything in searching for the ultimate foundation of the universe in a state where 'all was in all', reveals another meaning of the notion of the Big Bang: this is the Big Bang as the *telos of cosmological explanation* (as well as a *telos* of the human reason enquiring about the foundation of its facticity in the life-world in general).

In the natural attitude the meaning of the Big Bang is intended to describe the temporal origin of the universe as if it took place in the physical past. The ideal of cosmology and its own *telos* is to find such an explanation of the original state of the universe, its initial conditions, which would allow one, by using known physical laws, to describe in terms of species the variety of cosmic objects observed in the sky. The Big Bang, understood as being effectively the *telos* of cosmological research, and as an intentional activity of conscious human beings which advances and unfolds the sense of the universe forward in time, is allegedly placed within the natural attitude of the human mind in the physical past.

Here we see the competing tendencies of human subjectivity which cannot function properly if this subjectivity is not 'purified' by being placed within the philosophical (phenomenological) attitude. For those in 'the natural frame of mind' there is a paradox: how can we talk about the Big Bang as a *telos*, that is, something which is supposed to be in the future, if this Big Bang is by definition in the past?

To resolve the paradox, it is necessary first (as argued above) to abandon the natural attitude to the Big Bang, for the simple reason that its construct is achieved by means of a series of eidetic reductions, so that its physical characteristics, even if one admits the high degree of coherence in its theoretical description, make no sense in the context of what it is supposed

to be describing, namely, the present-day universe and the life-world.

Then, by being a fundamentally unfinished and unfinishable construct, all existing and future theories of the Big Bang have equal weight and importance if they are treated from within a strictly scientific discourse. Because cosmology tends to become the science of the whole universe, the very idea of the cosmology of the Big Bang can only be a 'normative form situated at infinity'. Thus each historical realisation of cosmology in its theories still has the idea of the Big Bang (as the hidden totality of all) for its horizon.

The importance of cosmology becomes evident if it is appropriated phenomenologically, when the reduction of all historical facticity of its theories is performed and the essence of cosmology as a search for the foundation of the contingent facticity of all is revealed. In this case the presence of the Big Bang theories in cosmology reflects the deep and inherent propensity of human incarnate subjectivity to enquiry about its own facticity as well as the facticity of being. This is what Husserl called *entelechy* of the reason, the reason which attempts to disclose the meaning of the universe in the perspective of its *telos*, when it will be united to the entire universe, that is, when for this reason 'all will be in all'.

But cosmological thinking does not appreciate its own intention for the Big Bang as a 'teleological principle' of the working of the mind itself. The natural attitude of a cosmologist treats the Big Bang in terms of objectivity pertaining to a remote hypothetical past. As a result, its consciousness does not realise that, in fact, it acts as a center of disclosure, whose actions are initiated by the *telos* of cosmological explanation, which is always in the future. The natural attitude of a cosmologist drives him away from an existential question about the facticity of humanity (and hence the facticity of the universe) which is seen just as the prolongation and extension of the physical into the biological and then the psychological.

The theological sense of this oblivion of the human presence behind all theories is that cosmology is fundamentally incapable of transcending the facticity of the physical in order to contemplate its purposes and ends which are disclosed to humanity not through its ability to sense and think but through its ability to feel the tragedy of created existence as its implicit eschatology.

It is this inability to make a transcendent move towards the source of life and existence of the universe that leads to its substitution by a surrogate of transcendence towards the substance of the Big Bang. This is brought about through various hypotheses about the initial conditions of the universe.

Conclusion: transcendence in cosmology?

Cosmology attempts to overcome the mystery of the identity of the universe, as the hidden name of its facticity, as its 'presence in absence', through the acquisition of the eidetic presence of the underlying impersonal substance. It then attempts to 'personalise' the universe (to make it its own possession) by subjecting it to the ambitions of the mathematising human reason. It wants the universe to be known across its span in space and time in order to make the universe as a whole 'present in its presence'. But to achieve the 'presence in presence' of the universe would mean to understand not only its initial conditions and hence its identity, its ultimate purpose, but also the principle of its creation (its *logos* of creation, or, the movements of the 'mind of God', in a Western parlance). But this kind of transcendence is not available to cosmologists, because cosmology, as we tried to explicate above, is intrinsically apophatic. Thus the ultimate sense of the universe and its ontological ground remain a mystery which cannot be subjected to a discursive analysis.

If this intrinsic apophaticism is understood and reflected in cosmology, so that its knowledge is treated as a symbolic expression of our intuition about the unity (identity) of the universe, then none of the non-human and impersonal characteristics of the Big Bang present any problem, because they do not reflect truth, and have existential meaning only as a form of ethical orientation.²⁶

In this case, the Big Bang cosmology, even if it is based on the ideas of coherence theories of justification, being still symbolic in its essence, does not affect the perception of the life-world and does not mislead the human spirit into a deviation from communion with the ground of its creation. The idea of the Big Bang then loses its objective reference, and

becomes a symbol of that intentionality which attempts to express the foundation and ground of its own facticity through the principle of its otherness. It thus, inevitably but un harmfully, contains the features of the otherness of humanity itself.

If the reflective and critical mind, having overcome the natural attitude, understands this, it is safe from all the fallacies of the objectivising tendencies in cosmological research. Furthermore, it understands that its theories express the human desire for transcendence and for overcoming psychological and ontological relativism. But no more than this, for genuine transcendence implies the pre-philosophical and pre-rational hypostatic communion with the ground of the created universe and consciousness itself.²⁷

The identity of the universe, sought in the form of the Big Bang in scientific cosmology, thus reflects the movement of the soul to search for that which is unknown and unclear in the foundation of human conscious life. This allows us to assert that the apophatic attitude to truth, asserted by cosmology and developed along the lines of phenomenological philosophy, evokes a far wiser and more humble relationship to the origin of the universe, reflecting thus a far wiser and humble relationship to the origin of ourselves.

Acknowledgements

I would like to thank John Bowker for very helpful critical comments after reading the outline of this paper, and George Horton for his comments and help with polishing the style and language of the paper.

Notes

- 1 G. Marcel, *Being and Having* (London: Collins, 1965), p. 24 (emphasis added).
- 2 This is typical for all sorts of creation (mythological) cosmologies, that is, to assert communion with mysterious forces which animate the universe.

- 3 Because only those areas from which life is stripped off can be described by physics with a great efficiency.
- 4 For a brief introduction to this terminology, see J. Bowker, *The Sense of God* (Oxford: Oxford University Press, 1973), ch. 8.
- 5 Here one can observe the presence of two tendencies, contradictory from a phenomenological point of view: on the one hand, physics and cosmology represent an example of eidetic reduction of the historical plurality to a-historical physical laws (driven by differential equations with no intrinsic time); on the other hand, the internal temporality of consciousness (realised uniquely in different persons and thus implicitly making an ontological difference between them) as well as subjective time, are 'contra-reduced', so that the cosmological time is considered as existing objectively and independently of the human subjectivity, as if it could be grasped in the natural attitude. In the former case we effectively deal with the eidetic reduction, whereas in the latter case we deal with the procedure which is opposite to the transcendental reduction.
- 6 According to Hawking, temporal flux is a 'figment of imagination', so that the 'real' underlying world is a-temporal, that is, either trans-temporal or simply ever-existing. Here we have an example of dismissal not only of the internal time-consciousness, subjective time, historical time, but also the objective physical time. Temporality as a basic category of the world of living beings is eliminated. See *A Brief History of Time* (London: Bantam Press, 1988), p. 139.
- 7 S. Hawking and R. Penrose. *The Nature of Space and Time* (Princeton: Princeton University Press, 1996), p. 79.
- 8 Certainly the principle of correspondence with empirical evidence does not work here at all. One could raise a question as to whether the mathematical beauty of this theory and its intrinsic coherence, as an explanatory device, could provide another justification for this model to be 'true'. We touch upon this issue later in the paper.
- 9 See a detailed philosophical and theological analysis of Hawking's ideas in my *Light from the East: Theology, Science, and the Eastern Orthodox Tradition* (Minneapolis: Fortress Press, 2003), pp. 141–59 .
- 10 See a popularised version of his ideas in R. Penrose, *The Emperor's New Mind* (New York: Oxford University Press, 1989), pp. 435–47.
- 11 R. Penrose, 'Singularities and Time-Asymmetry', in *General Relativity: An Einstein Centenary Survey*, ed. S. W. Hawking and W. Israel (Cambridge: Cambridge University Press, 1979), pp. 629–32.

- 12 See a philosophical and theological analysis of this idea of Penrose in my *Light from the East*, pp. 171–7.
- 13 See, for example, J. Barrow, *Between Inner Space and Outer Space: Essays on Science, Art and Philosophy* (New York: Oxford University Press, 1999), pp. 26–7.
- 14 On coherence theories of justification, see, for example, R. Audi, *Epistemology* (London: Routledge, 1998), pp.187–204. See also a book of J. Bowker, *The Sacred Neuron* (London: I.B.Tauris, 2005), pp. 118–48, in which the author persuasively argues on the importance of coherence considerations in science and religion as a different form of justification in comparison with the correspondence principle.
- 15 The meaning of what are called ‘dogmas’ is linked to the Greek word *horos* (boundary, fence) which was used in theology in the context of the Church’s definitions with the purpose of setting out the boundaries of Christian faith and of protecting it against heresies. See, for example, C. Yannaras, *Elements of Faith* (Edinburgh: T&C Clark, 1998), p. 16.
- 16 J. Zizioulas, *Being as Communion* (Crestwood, NY: St Vladimir’s Seminary Press, 1985), p. 117.
- 17 See the quotation from G. Marcel at the beginning of this chapter.
- 18 J. L. Marion, ‘The event, the Phenomenon, and the Revealed’, in *Transcendence in Philosophy and Religion* (Bloomington: Indiana University Press, 2003), pp. 96–7.
- 19 So that the facticity of birth in its remote consequences is present whereas its origin or ground is absent.
- 20 G. Marcel, *Being and Having* (London: Collins, 1965), p. 24.
- 21 The analogy comes from St Maximus the Confessor’s discussion on whether God knows created things according to their nature. His answer is negative: God knows things according to his will (see *Ambigua*, 7. PG 91, 1085B.) Human beings, because of the divine image in them, imitate this desire to know according to their will.
- 22 Definitely one could suggest along the lines of the anthropic argument in cosmology that the non-human past of the universe was a necessary condition for the later appearance of life, so that there is no contradiction between what the Big Bang cosmology affirms as the non-human physical state and what emerged from these states afterwards. The naivety of this argument is based in the belief in the continuity of cosmological as well as biological evolution which led to emergence of consciousness and which articulates this same evolution as well as its origin. The difficulty lies in the part of this argument which is supposed to deal with the sufficient conditions

of emergence of consciousness. These conditions are not part of physics and rather belong to the realm of human will and destiny. It is in this sense that when F. Dyson, in his book *Disturbing the Universe* (New York: Basic Books, 1979), argues along the lines of the anthropic argument against J. Monod's apology for the accidental coming of intelligent humanity in the universe (by saying, 'I do not feel like an alien in this universe. The more I examine the universe and study the details of its architecture, the more evidence I find that the universe in some sense must have known that we are coming', p. 250) he effectively invokes a *teleological* argument by reference to the existence of another, parallel sense of the universe's future as the unfolding of transcendental history through which the physical history is articulated. But this 'knowledge' by the universe that we were coming cannot be consistently placed in the framework of scientific explanation. It is rather an axiological and soteriological argument which refers to the *teleology* of human reason. (I am grateful to John Bowker for bringing to my attention this quote from Dyson.)

- 23 This term was used by N. Berdyaev, who discussed the theme of 'cosmic temptation' in his book *Slavery and Freedom* (London: Centenary, 1944), pp. 93–102.
- 24 For the discussion of possible spiritual consequences of 'worshipping' the Big Bang cosmologies see, for example A. V. Nesteruk, 'The Universe Transcended. God's "Presence in Absence" in Science and Theology', *European Journal of Science and Theology*, 1/2 (2005): 7–19.
- 25 The ideas about the teleology of scientific research were developed by E. Husserl in his last work *The Crisis of the European Sciences and Transcendental Phenomenology* (Evanston: Northwestern University Press, 1970). See also A. Rizzacasa, 'The Epistemology of the Sciences of Nature in Relation to the Teleology of Research in the Thought of the Later Husserl', *Analecta Husserliana*, vol. 16, (Dordrecht: Reidel, 1977), pp. 73–84.
- 26 Cosmology can be a form of ideology, spiritual guidance and ethical imperative. In ancient societies cosmology was important in envisaging expectations by knowing the environment. This sustained the foundations of ethics where the moral order was deduced from the natural one. See, for example, R. W. Lovin and F. E. Reynolds, eds, *Cosmogony and Ethical Order* (Chicago: The University of Chicago Press, 1985): I am grateful to John Bowker for pointing out to me this title; F. Mathews, *The Ecological Self* (London: Routledge, 1991). In the present state of humanity cosmology can become an ideology which can impose strange views and social and ecological patterns and which can therefore undermine the natural grounds of humanity's existence, and thus

the existence of cosmology itself. See, for example, my *Light from the East*, pp. 239–44.

- 27 If this does not happen and the Big Bang theories are taken along the line of the natural attitude, then the immanence of the mind is contradictory and dissolves itself into impersonal cosmic material.

On Knowing the Unknowable: Immanuel Kant and the Unknowable Real

Keith Ward

Immanuel Kant is one of the last writers anyone would claim as a mystic. In his Critical philosophy he regarded all alleged mystical experiences as empty and fanatical. The idea of religious experience is almost completely lacking from his post-Critical works. If claims to knowledge of God rest on mystical experience, then for Kant it seems that God is completely unknowable.

And yet when he was younger Kant had bought each volume of Emanuel Swedenborg's *Arcana Caelestia* as soon as it was published. He had believed that the mind has access to the intelligible world of reality, underlying the sensory world of appearances. Throughout his life he continued to call this reality 'the noumenal realm', the realm of mind, believing that it existed, and that in that realm we have to think of God and the community of rational and free created beings.

It seems clear that Kant never completely exorcised his belief in a spiritual reality, about which we could have no theoretical knowledge, though we can and do have practical knowledge of it. It is this distinction of theoretical and practical knowledge that is Kant's contribution to the debate on whether, and in what sense, we could know the unknowable.

We can, he suggests, know the world of *Dinge-an-Sich* practically, but not theoretically.

Kant argues for the religious and ethical importance of the absence of God, both in the sense of lack of experience of God and of lack of any theoretical knowledge about God. So perhaps consideration of his work can make a small contribution to the topic of this volume.

The distinction for which Kant is best known, and which is the foun-

dation of his Critical philosophy, is the distinction between the phenomenal and noumenal worlds. The phenomenal world is the world as it appears to us, and the way it appears is largely a consequence of the nature of our cognitive apparatus. Kant never doubts that the phenomenal world is not the real world of things as they are in themselves.

In his pre-Critical philosophy, before 1781, he held that the mind has access to the real world that the senses do not have. The real world he called, and always continued to call, noumenal, purely intelligible, and apprehensible through intellectual intuition.

The Critical move was to suppose that the mind does not apprehend reality directly or through intellectual intuition. The mind splits into the two faculties of Understanding (*Verstand*) and Reason (*Vernunft*). Each faculty constructs the idea of an objective world, with a universal and necessary structure. In the case of Understanding, this structure is filled with sensory content. The categories of Understanding are schematised, their purely formal structure is given content by data provided by the senses. But in the case of Reason, there is no content to fill out the conceptual structure, and so while the structure remains necessary for human minds, it is empty, and cannot give rise to theoretical knowledge.

So there is a real world, but we can have no theoretical knowledge of it. This seems to be an outright contradiction. To know that something is, is to know something about it. Indeed, Kant assumes that the noumenal world is the reality of which the empirical world is an appearance. So it exists, it is non-spatial and non-temporal, and it is the cause of space and time and everything in them. At least two categories, that of 'existence' and that of 'causality' are being applied to it.

This contradiction can be avoided only if we deny that these categories give theoretical knowledge. We can do this by insisting that theoretical knowledge must have some content verifiable by sensory experience, at least in principle. And I think this is what Kant in effect does. He defines 'theoretical knowledge' so that it must be publicly verifiable in principle. The world of theoretical knowledge, for Kant, is in effect the world of Newtonian physics. Theoretical knowledge is confined to items existing in, or at least having discernible and particular effects upon, the publicly experienced world.

But there are reasons for thinking that the experienced world is not reality in itself. These reasons are largely provided, according to Kant, by the Antinomies of Reason, the contradictions into which we are led by assuming that we have knowledge of what is truly and independently real. Study of the empirical world itself shows us that it is only a world of appearance, a world of the interactions between the human mind and a 'veiled reality' to which we cannot penetrate by observation or experiment.

The situation is remarkably like that posited by some quantum physicists, and it is no accident that Neils Bohr acknowledged the influence of Kant upon his own thought. There are good reasons in quantum physics for supposing that we have no theoretical access to the reality that underlies our observations. But we can be fairly sure that the reality is not what we observe – the nature of which depends upon the form of measurement we are making. So quantum physicists like Bernard D'Espagnat speak of a 'veiled reality' to which we can never penetrate by the methods of science – though the mathematical construct of probability waves in Hilbert space provides a structure, however little we can picture it in non-mathematical terms, that explains in impressive detail the events detected by observation in cloud-chambers and on phosphorus screens.

So in many accounts of quantum physics, there is evidence for the proposition that the world we observe is not reality as it exists in itself – 'no elementary phenomenon is real unless it is observed', as John Wheeler provocatively put it. We cannot access that world beyond the senses, or even be quite sure that it really exists, for it may just be a construct of the mind which helps us to explain and predict what happens in the observations on which quantum physics is based. In that sense it is unknowable.

Such a forthright phenomenalism would itself be to many a fantastical construct, since physics is supposed to be about reality, and not just about mental imaginings. But perhaps all we can say is that our mathematical constructs work, and that they probably apply to something. We cannot picture to ourselves what that 'something' is. So we just have to say that the mind provides a sort of sketch of how we may think of it, though we cannot claim to know it is like that, or even exactly what it would be like if it were like that!

Quantum physics is a very peculiar subject, but it does provide an apt illustration of what Kant had in mind in distinguishing practical from theoretical knowledge. For Kant, the human mind – Reason – dictates that we must think of the underlying veiled reality in specific ways, for certain important practical purposes. We may even make an ‘optional assumption’ that the noumenal world really is that way. Yet our ideas of it are empty (unverifiable), and the world they envisage may even be impossible, as we imagine it. That is why we cannot claim to have theoretical knowledge of Reality. But we can claim to have practical knowledge, for we must think of Reality in specific ways, in order to underpin some of our most important practical beliefs, particularly those concerning moral freedom and commitment.

These Ideas of Reason, Kant says, have a purely regulative use. They guide the Understanding in its investigation of the phenomenal world. More importantly, perhaps, they prescribe ideals to guide our wills, they lay the foundation for belief in responsible moral freedom, and for belief in a moral order in reality. Yet they do not describe objective reality, and we can never verify them empirically. We must act as if reality is as reason conceives it, but we can never be sure it is so, or, Kant sometimes suggests, we may even be fairly sure it is not exactly as we picture it.

Theoretical knowledge, the sort of knowledge we look for in the natural sciences, is not available. Practical knowledge is knowledge presupposed to action though not observationally testable. An example of such practical knowledge, for Kant, is the knowledge that we are morally free. As far as the phenomenal world goes, we can know that all human acts, like everything else, are sufficiently determined by prior causes and the laws of nature (Kant thought), since Understanding requires us to think that, and all our scientific observations confirm it. Causal determinism is a condition of the possibility of science. (Quantum physics tells us that this is almost certainly not the case, but that is another story.)

Yet if we are to hold people accountable for their acts, we must presuppose they are free. Kant’s solution to this old dilemma is to suppose that persons are free in the noumenal world and determined in the phenomenal world. This may seem like a rank contradiction, but the Oxford philosopher Peter Strawson has suggested a reformulation that makes sense

of it. When we regard persons as objects in the physical world, observe them and record their behaviour, we must assume they are, like everything else, determined. But when we regard persons as beings to whom we have reactive attitudes of resentment, praise and blame, we must presuppose that they are free and responsible. These are different realms of discourse, and each has its own presuppositions. They are two different ways of talking about the same beings.

Ingenious as this formulation is, I cannot believe Kant could have accepted it quite in that form. Kant wished to suggest that persons are phenomenally determined but noumenally free, not that freedom and determinism belong to two different ways of speaking of the same phenomenal beings. Science deals only with appearances. Reason and its postulates deal with reality, and so operate at a deeper level. But we can never theoretically establish this.

The reason we must think it to be the case is that doing so is a condition of the possibility of moral discourse, of living as morally responsible agents, and so of accepting persons as moral agents. We must see persons that way, since the primary (and only ultimate) moral rule is the categorical imperative – that we should treat all persons as free legislators of a universal moral law. Morality, Kant thinks, would be impossible without belief in human freedom, and morality is categorically binding upon us. So we must believe in noumenal freedom on moral grounds. We are obliged to do so, as a condition of the possibility of having genuine moral obligations. Theoretical knowledge is justified by the possibility of public sensory confirmation. Practical knowledge is justified by the moral obligations we feel as human beings. But it is an odd sort of knowledge, since it allows that reality may not be as we think it, even though we have to think of it in this way because our moral commitments require it.

Kant goes even further in his often quoted statement, ‘I have found it necessary to deny knowledge in order to make room for faith’ (Preface to the second edition of the *First Critique*). Here he attempts to give a positive reason why theoretical knowledge of the noumenal world should be impossible. Moral commitment can only be genuine, he thinks, if it cannot be grounded on theoretical certainty. If we knew for certain that our good acts would be rewarded and our evil acts punished, we would

be psychologically unable to do what is right simply for its own sake. We can and should hope that good actions will have their reward. But that hope must be grounded on moral commitment, and it can never become the reason for such commitment. It is morally important that we should pursue the good for its own sake alone. Nevertheless, such commitment presupposes the truth of certain claims about reality – for example, that human persons are free – and so it is vital that we can know (practically) some things about reality that are unknowable (theoretically).

Thus far I hope at least to have shown that Kant is relevant to the topic of this volume. But is there anything to be said for his arguments?

Consider his argument that theoretical knowledge of God and the afterlife would undermine ‘faith’, or genuine moral commitment for its own sake. It seems to be true that if we know something for certain, there is no need for faith, in the sense of ‘taking on authority’.

However, we might know for sure that God exists, and still have a choice of whether to trust God’s promises and commit our lives to serving God. In support of Kant’s view, John Hick has proposed that if we really knew God existed, our awareness of the divine power and love would be so overwhelming that we could not avoid obeying God and believing whatever God said. At least a certain degree of divine absence is necessary to give us the freedom to obey or disobey God.

There is something in this argument (and it is one of those pursued by the Indian commentators discussed by Francis Clooney: see Chapter 11). If I am to disobey God, I must be capable of doing so, so God cannot determine my every action. It would not make much sense to say that God determined me to turn away from and disobey God. In addition, there must be something other than God that could realistically tempt me to disobey, and this entails that the sense of divine presence and power cannot be overwhelmingly obvious. If I knew that disobedience would certainly lead to an eternity (or even a very long time) of torment, it would be irrational to disobey. I would, if I were rational, obey, even if out of fear of punishment.

Yet this is not wholly convincing. God will presumably know the difference between a person who obeys out of fear and a person who genuinely returns the love of God. There is a difference between obedience out of grateful love, and obedience out of craven fear, and that can be seen as

a decisive moral difference. So an important moral freedom could exist even where beings are certain of God's existence. 'The devils also believe and tremble' (James 2: 19).

In addition, if there is a Paradisal existence, in which we are no longer tempted to wrongdoing, then moral freedom is compatible with a strong sense of God's presence. True, we would no longer sin, for we would not wish to. But we would still be free, and our freedom would consist in willingly doing what God wishes, and in creatively implementing God's intentions in our own way. So we might reject the view that the absence of God is necessary to moral freedom and responsibility. It seems that our sense of divine absence is more a consequence of our misuse of freedom than a condition of its use.

Kant's point receives a fuller and, I think, more satisfactory treatment in a number of essays he wrote between 1784 and 1798, on human origins and human progress (*An Idea for a Universal History* [1784], *On the Conjectural Beginning of Human History* [1786], *Perpetual Peace* [1795], *The Strife of the Faculties* [1798]).

In these essays he gives an evolutionary account of human existence. When human existence is placed in an evolutionary frame, humans are seen to have evolved from less intelligent forms of life over millions of years. It is then clear that any sense of God that existed in pre-hominid existence could not have been conceptually developed. Our ancestors might have existed in a state of 'dreaming innocence', as Hegel supposed. They might have had a sense of a superior personal reality and of objective moral obligation, but it is most unlikely to have been accompanied by the thought that this was an encounter with one supreme personal source of objective goodness.

Anthropological studies suggest that most pre-literate cultures accept a world of spirits, apprehended in visions, dreams and trances, and of holy persons who have special access to that world. There is a sense of a spiritual reality, but it seems to be pluriform, morally ambiguous, and depicted not in doctrines but in many different stories and rituals. The idea of one creator Spirit, concerned primarily with moral goodness, seems to be a rather late one, propounded in particular by the prophets of the Hebrews.

In other cultures, like that of India and China, ideas of a spiritual reality came to be formulated in a different way. But in the Middle East the debate as it developed after about 3000 BCE was not between God and atheism. It seems to have been between one God of moral goodness and a world of many spirits, good and bad, concerned mostly with fertility and war.

From an evolutionary view, there was never a time of clear knowledge of God, leaving the problem of how anyone could reasonably choose to disobey such a kind and loving creator. There was a slow ascent to formulating conceptions of a spiritual world, experienced as real, but only gradually, and only in some cultures, articulated as encounter with one God.

The question, in such a context of millennia of developing spiritual experience and interpretation, is not whether it is better for God to be absent; it is whether evolving hominids can formulate a clear and correct conception of what God is. Since early humans were, as far as we can tell, violent, aggressive and rapacious animals, we might expect their ideas of the spiritual realm to reflect such characteristics. There would be violent, aggressive and rapacious gods and spirits, as well as kind and morally admirable ones.

It is anachronistic to think of early humans as living in an epistemically ambiguous world, having to decide to commit to a supreme moral God or not. What they would have to decide is the character of the spiritual realm in which they live. As the Hebrew Bible shows pretty clearly, it took a long process of developing prophetic teaching to forge the idea of one good creator. This does not mean God was absent. It means that the character of God, of spiritual reality, was unclear, and such unclarity is a necessary consequence of the process of evolution.

The world is ambiguous and puzzling, since it is beautiful, joyful, but also dangerous and destructive. As we constantly experience the physical world, but have to work out its laws for ourselves, so we may constantly experience the spiritual world, but have to work out its nature for ourselves. The underlying reason for this is that humans are at least partly self-shaping beings in an evolving universe, and their thoughts and consciousness develop by effort, trial and error.

God may always be present, in art, in morality and in the struggle for

truth. But God's nature is to be discerned by reflection on experience and imaginative effort. It is not just that epistemic distance from God is necessary for moral freedom. As evolving beings, humans have to struggle for truth in every area of life. Truth is not simply given, but must be discovered through creative effort – which often leads to many mistakes and false trails. The seeming absence of God is just a special case of the difficulty of discovering the truth about anything.

Moral freedom is equally a special case of the character of humans as developing organisms striving for truth, a truth that is undoubtedly there, but is exceedingly hard to discover.

In this context, it is not sensible to ask whether the abstract possibility of disobeying God is a good thing. This is a universe in which conscious beings originate and develop by goal-oriented striving for truth, beauty and goodness. We do not begin with a clearly formulated idea of God, and then ask whether such a God can be disobeyed. The process of developing an idea of God is part of the same process that gradually develops ideas of categorical moral obligation, of aesthetic sensibility, and of scientific truth.

The process of seeking truth generates many alternative possibilities, and many of them do not involve the idea of one creator. Some Indian cultures developed ideas of *Brahman*, of one ultimate and all-including reality, beyond all personal attributes. Buddhist traditions developed the idea of *Nirvana*, a state of knowledge and awareness, but not a personal creator. 'God' is, in a global context, just one imaginative possibility for interpreting experience of a transcendent spiritual reality.

Kant's treatment of religion was vitiated by his failure to take such experiences seriously. But it is possible to see how the human mind can construct a number of interpretations of transcendental experiences, most of them attempting to provide models of an apprehended reality that cannot be grasped by the methods of scientific observation and experiment.

If that is the case, theoretical knowledge of such a transcendent reality would be impossible. But practical religious knowledge might have the same logical structure as Kant posited for practical moral knowledge. That is, humans would need to think of reality in a specific way, in order to

provide a rational basis for their basic practical commitments. In the case of religion, such commitment would be to overcoming selfish desire and self-importance, and achieving a conscious relationship to a greater reality of supreme intelligence, bliss and compassion. Religious thought would posit Ideals of Supreme Value, in relation to which human life might find practical fulfilment.

Kant did not take this path, though his practical postulate of God as the *Ens Realissimum*, and his increasingly close identification of duty and the commands of God (in his latest works), suggests that only his strong antipathy to private religious experiences prevented him from doing so. A Kantian approach to these topics today would have to take due account of the range of diverse models for transcendence that humans have produced. But it could certainly utilise Kant's notion of practical knowledge, as a set of postulates that provide the condition of the possibility of religious practice and worship, in a realm where theoretical (publicly verifiable) knowledge is impossible.

Without a concern to seek something other and greater than oneself, it is easy to allow the self to become the centre of all things. Self-centred desire will corrupt all it touches, including the idea of God and goodness. It is not that many people know God and reject God. Many simply do not care about God, about the search for spiritual truth, and so the idea of God never occurs to them as a real possibility – or if it does, it is as a corrupted and debased idea of a malevolent tyrant.

A concern to define and know objective values might be considered a possibility essential to the nature of humans as spiritually oriented evolving carbon-based life forms. But all human concerns can be – indeed, we may well think they are – corrupted by self-centred desire. If that is the case, God may seem to many not an ideal to be pursued, but a dictator to be avoided. In that situation, a person who seeks God, but who is keenly aware of the problematic nature of all ideas of God, may feel 'the absence of God'. Even the devout believer may feel that God cannot be adequately understood or apprehended in a world disfigured by egoistic desire. The true God is absent, hidden behind the distorted ideas generated by corrupted human thought.

Nevertheless, the idea of God remains as the objective ideal of goodness, inviting us to draw nearer to it, but always lying beyond our grasp. When

Kant spoke of 'ideals of Reason', perhaps he had this sense that the ideal is beyond our grasp, that the world of reality is inaccessible to us, though it invites us to strive for it, to regulate our lives by it, as an asymptotic ideal. We know what we are striving towards, but we do not know it as an adequately conceived present reality. The sense of striving for an objective ideal that cannot be apprehended in its fullness generates the belief that, while God exists and must be conceived by us in terms of the best we know, God is an inviting absence yet to be made fully present. The absence of God is not the withdrawal of one who was once clearly known, so much as the existence of an ideal, always dimly conceived and partly distorted, that yet draws us on towards fuller and more accurate knowledge.

Kant, therefore, asserts that there is an unknowable reality, the basis of phenomenal reality, that must be conceived by us in terms that underpin our commitment to seek objective beauty, truth and goodness, but that always lies beyond our conceptions. To have clear knowledge of God would make us different creatures, whose lives were not characterised by striving, goal-directed effort and self-development. Belief in God is a practical commitment that directs us towards the good – towards truth, beauty and goodness, in the hope that it can be found, but in acknowledgement that we do not yet possess it. Our conception of the good is rational, but we cannot demonstrate that there is an absolute good as the terminus of our quest, or that it is irrational not to pursue it. In this context, the unknowability of God is not something to be lamented.

What is missing in Kant is the belief, central to religious practice, that the Good itself is an object of apprehension clear enough to motivate our moral quest. But what is apprehended is something whose true nature is withdrawn, a reality we cannot describe with any adequacy. It elicits what Kierkegaard called 'choosing the objective uncertainty with the passion of the infinite' (*Concluding Unscientific Postscript*, Part 2, Section 2, chapter 2).

It is not, as Kant seemed to think, religiously important to lack experience of God, though it probably is important not to claim that such experience as we have gives certain and precise theoretical knowledge of God. Sometimes when people speak of 'the unknowability of God', or

of 'the absence of God', it is because they lack what they have no right to expect, a clear theoretical knowledge of that which is ultimately real. Belief in God is more a matter of practical commitment than of theoretical assent, and ultimate reality is beyond the categories of human thinking. Kant's thought that we can have practical knowledge of what is theoretically unknowable seems to me an important one. It offers a way of speaking intelligibly of that 'which cannot be grasped by thought, but only by love'. Kant may not have been a mystic, but he was, paradoxically, nearer to mysticism than he would ever have wished.

Three Forms of Negativity in Christian Mysticism

Bernard McGinn

In her *Notebooks* the twentieth-century French philosopher Simone Weil makes the following observation:

Contact with human creatures is given us through the sense of presence. Contact with God is given us through the sense of absence. Compared with this absence, presence becomes more absent than absence.¹

The observation that God is found in absence more than in presence is not just the result of the problematic position of claims about God in the modern secular world, but also reflects a contemporary retrieval of the role of absence and negation in the Christian tradition. For example, although it is not clear how much of Meister Eckhart Weil may have read, there are deep affinities between her view of God's absence and the preaching of the thirteenth-century Dominican.² Citing a favourite text from Isaiah, Eckhart once proclaimed: "Truly, You are a hidden God' (Isa. 45:15) in the ground of the soul where God's ground and the soul's ground are one ground. The more one seeks you the less one finds you. Therefore, you must seek him in such a way that you never find him. If you do not seek him, you will find him."³

Such dark sayings suggest that God's absence is as important for a proper approach to the divine mystery as is the sense of the divine presence and the affirmation of God's existence. The philosopher Louis

Dupré has provided useful insights on the significance of God's absence in the contemporary world. In his paper 'Spiritual Life in a Secular Age', Dupré argues that it is precisely the absence of God felt by both contemporary believers and unbelievers that can serve as a source for the renewal of modern spiritual life, 'For only after having confronted his atheism can the believer hope to restore the vitality of his religion.'⁴ Hence it is no surprise that a number of recent studies have argued that the apophatic tradition, that is, forms of negative theology emphasising the impossibility of naming God, have a role to play in confronting the contemporary denial of God.

The turn to the apophatic in recent philosophy and theology is evident in many ways. What has not yet been sufficiently appreciated is that apophasis is only one of a cluster of forms of negation in the history of Christian spirituality and mysticism. A fuller retrieval of the negative dimension in contemporary spirituality needs to consider at least two other forms of negativity found in the tradition. For the sake of convenience, I will refer to these as Negativity I, Negativity II, and Negativity III –three forms of negation by no means separate, because in many ways they imply each other and were often intermingled in various thinkers. Nevertheless, I believe it is not only possible but also useful to distinguish them.

Negativity I involves knowing and speaking. It is a form of 'unsaying God', that is, the conviction that the God we speak about and address in reality lies so far beyond human speech that at some point language needs to negate itself when attempting to point towards God.⁵ In this sense, God is more than a mere 'unknown' that might become knowable the way that certain mathematical and scientific problems currently unsolvable are worth further investigation. God is not a problem to be solved, but a mystery to be pondered precisely because the divine nature remains unknowable.

Almost all Christian theologians, of course, have admitted that God is a mystery beyond human speech, but many thinkers have tended to leave negation at that and to concentrate instead on what can be said about God, however imperfectly, on the basis of reason and revealed truth. In contrast to this weak apophaticism, however, we find the tradition of

strong apophaticism rooted in scripture and first evident systematically in the patristic period in the writings of Clement of Alexandria. This rigorous apophaticism was taken up by the Cappadocian Fathers and given a more developed expression around 500 CE by Pseudo-Dionysius, whose writings exercised considerable influence in both the East and the West.⁶ Although Dionysianism was not the only form of strong apophatic theology and mysticism in the history of Christianity, after long neglect it has emerged as a significant force in philosophical and theological discussion in the past decades.⁷

Negativity II is concerned with will and desire more than language. It is the negation involved in ‘stripping-away’, or ‘cutting-off’, that is, the destruction of all desire through the rigorous inner ‘detachment’ (*abgescheidenheit*) and pure ‘releasement’ (*gelassenheit*) preached by Meister Eckhart and his followers. This negativity also has roots in scripture and tradition, notably in the Gospel command to give up all things and follow Christ (Matt. 19:21, etc.).

It, too, has a long history in the tradition, though mostly in an implicit mode. Although Negativity II was first brought to explicit expression in Eckhart, Eckhartian detachment from created things built upon the ascetical imperative that had been part of Christian life and practice from the beginning.⁸ The detachment of Eckhart and his successors, however, went further than the usual understanding of asceticism, in two ways.

First, detachment as Negativity II insists that interior cutting-off and letting go is a different thing from exterior practices of self-abnegation, however laudatory. Ascetics can be (and often are) as attached to their practices of virtue as much as hedonists are to their voluptuous delights. For Eckhart, detachment is based on the giving up of any and every practice insofar as it is seen as a means to an end. It is a form of non-teleological ethics. So, as Denys Turner has shown, detachment is not some particular kind of experience of ascetic practice or negation, but is rather a practice for the transformation of experience – the application of apophatic theology to human desire, ‘the ascetical practice of the apophatic’.⁹

Second, as Eckhart and some of his more daring followers insisted, the ultimate form of detachment goes beyond giving up everything created, including the created will, in order to be willing to release even God, that

is, to leave God for God's sake. To cite Eckhart once again: 'I assert that it is more important for the soul to forsake God to attain perfection than it is for the soul to forsake creatures, or all will be lost. The soul must exist in a free nothingness. That we should forsake God is altogether what God intends, for as long as the soul has God, knows God, and is aware of God, she is far from God.'¹⁰

The negation of detachment concentrates on our letting go of *our* desire, though by releasing not by striving. The third form of negativity found among the mystics and some non-mystical theologians like Luther emphasizes God's action. This is Negativity III, the absence that follows when God withdraws himself. Such negation is not just a neutral absence, due either to God's forgetfulness or our own. Rather, it is the negativity of dereliction and affliction: the tortured sense of loss, pain, and even damnation, when God abandons those who seek him.

One of the most potent descriptions of this form of negativity is found in the Franciscan tertiary, Angela of Foligno, whose *Memoriale* dates to about 1300. In the sixth supplementary step of Angela's complicated mystical itinerary there is an account of the trials she endured as she approached the deepest stages of mystical union, long after her more traditional erotic and visionary encounters with Christ.¹¹ Afflicted by internal torments and diabolical temptations, she says that she felt like

a person blindfolded with his hands bound behind him and hung by the neck from a rope, yet remaining alive on the gallows, without any aid or any kind of support or rescue.

This is a potent image for medieval folk who often witnessed hangings, albeit ones that mercifully ended after a few minutes of agony. In this state Angela tells us that she raged against herself, beating and punishing her body, and turning the tables on Christ by crying out, 'My Son, my Son, do not abandon me' (Matt. 27:46).¹²

In what follows I will try to flesh out these three forms of negativity and make some tentative suggestions about their contemporary retrieval.

Negativity I.

Eckhart's contemporary, the French beguine Marguerite Porete, executed for her mystical teaching in 1310, aptly summarises Negativity I in her *Mirror of Simple Annihilated Souls* when she says: 'He alone is my God of whom no one can say a word.'¹³ Marguerite's rejection of the cataphatic, or positive, aspect of speaking about God is among the most extreme in the history of Christianity,¹⁴ but lest one think that such a suspect mystic stands outside the main line of Christian teaching about knowing and naming God, let us consider a few other negative pronouncements from impeccably orthodox figures. In a famous text from the *De doctrina christiana* 1.13, Augustine says:

Have we said or sounded anything worthy of God? Rather, I recognize nothing more than that I wanted to say something. If I said something, it was not what I wanted to say. How do I know this? Because God is ineffable. But if he be ineffable, what I said should not have been said. Hence, God should not even be said to be ineffable, because when you say this you say something about him. There is a kind of war of words here, since if the ineffable is what cannot be spoken, then what can be called ineffable is not ineffable. This war of words is to be safeguarded by silence, not settled by speech.¹⁵

He puts this more succinctly in one of his sermons: *Si comprehendis, non est Deus* ('If you understand it, it is not God').¹⁶ Augustine's contemporary, Gregory of Nyssa, in his *Life of Moses* agrees: 'Every concept formed in order to reach and encompass the divine nature succeeds only in fashioning an idol of God and not at all in making him known.'¹⁷

Such strong words might seem to reduce most theology to idolatry. Indeed, not only is God in Godself unknown, as Porete, Augustine, and Gregory aver, but the path to God shares in this unknowability. John of the Cross put it this way: 'The traces and footsteps God leaves in those whom he desires to bring to himself, by making them great in union with his wisdom, are unrecognizable.'¹⁸

A good deal of contemporary theology and preaching seems to have little sympathy with the apophatic dimension of Christian belief, but there have been some powerful modern proponents of its importance. (Again, I cite only to point to witnesses, not to present them in detail, nor to argue that they are all saying quite the same thing.) The great English preacher of the nineteenth century, John Henry Newman, describes how the world contrives to mask God's presence in an eloquent passage from his sermon 'Waiting for Christ':

When he came in the flesh 'He was in the world, and the world was made by him, and world knew him not' (John 1:10). Nor did he strive nor cry, nor lift up his voice in the streets. So it is now. He is still here; He whispers to us, He still makes signs to us. But his voice is too low, and the world's din is so loud, and his signs are so covert, and the world is so restless, that it is difficult to determine when He addresses us, and what He says. Religious men cannot but feel, in various ways, that his providence is guiding them and blessing them personally on the whole; yet when they attempt to put their finger on the times and the places, the traces of his presence disappear.¹⁹

In the twentieth century another great theologian and preacher, Karl Rahner, stands out as perhaps the foremost spokesman of a divine hiddenness and incomprehensibility that is rooted not just in the disturbance presented by the world but in God's very nature.

Rahner presented this case both in his theological papers as well as in his sermons and meditations. For example, the collection called *The Great Church Year* has a moving homily on Lent which presents a stark picture of the absence of God in the modern world, both to believers and unbelievers. Rahner, not unlike Eckhart, insists that God is not to be sought or grasped at in the empty heart *precisely* because he is already there.

Your lack of outlet is only God's incomprehensibility, to whom no road is needed Do not seek to hold him fast. He does not run away He is there, right in the midst of the choked-up heart, he alone. But he is all, and so it appears as if he were nothing.²⁰

The conviction that if God be God, the Supreme Principle, God must be unknowable both in Godself and in his actions in the soul, at least in the way that *things* are present and known to us, has an often forgotten implication in Christian understanding of the nature of humanity, that is, in theological anthropology. The corner stone of the Christian view of human nature is Genesis 1:26 where the mysteriously plural God says, 'Let us make humankind in our image, according to our likeness.' If humankind is the true image of the unknown reality we point to when we use the word 'God', can the image, at least in its essential nature, be any more knowable or accessible than its exemplar? Hence, an apophatic doctrine of God implies an apophatic understanding of humanity, at least to many theologians and mystics.

The earliest clear appearance of such a negative anthropology seems to be in Gregory of Nyssa, perhaps because for the Cappadocians divine infinity and unknowability form the theological fulcrum of their thinking.²¹ In his treatise on creation called *The Making of Man* (*De hominis opificio*), also known in the medieval West as *De imagine*, Gregory reflects on the impossibility of knowing the mind of the Lord (Rom. 11:34) and the correlative mystery of the human mind itself, finding the key to the latter in Genesis 1:26.²² Gregory says that an image is properly an image insofar as it has all the attributes of its archetype. 'Therefore,' he continues, 'since one of the attributes we contemplate in the divine nature is incomprehensibility of essence, it is clearly necessary that in this point the image should be able to show its imitation of the archetype.' Because the nature of our mind evades our knowledge, Gregory concludes, 'it has an accurate resemblance to the superior nature, figuring by its own unknowableness the incomprehensible nature.'²³

Gregory did not expand upon the implications of this claim, but his Latin translator, John Scottus Eriugena, did, especially in his *magnum opus*, *Periphyseon*.²⁴ The Irish scholar advanced a series of four interlocking theses that at first glance seem bizarre, even preposterous, but after close study reveal a bold and coherent apophatic perspective.

The first thesis, that *humans cannot know God* is unexceptionable. But John then argued in the second thesis that *God cannot know God*. The key to understanding what he means by this is to distinguish between two

forms of knowing: the knowing that defines (*cognitio quid est*) by which a mind delimits and encompasses *some-thing*; and the act of self-affirmation by which a mind knows that it is (*cognitio quia est*). The latter form of knowledge is realized transcendently in God, but the former must be denied. As Eriugena says, 'So God does not know of himself what he is because he is not a "what"'.²⁵ Divine absoluteness and infinity preclude God knowing himself in the sense of defining himself, because this would imply self-limitation and God being greater than himself. Paradoxically, God's ignorance of self is, according to John, an 'ineffable understanding' (*Ipsius enim ignorantia ineffabilis est intelligentia*).²⁶

Thirdly, when Eriugena turns to an investigation of human nature, especially in Book 4 of *Periphyseon*, he develops Gregory of Nyssa's insight in a systematic way. *Humans do not know what humanity is* because the human mind (the essential element in humankind) is also not a 'what'. Eriugena's treatise on the soul (*Periphyseon* IV.5–12) explores the meaning of humanity being created in God's image in terms both of the activity of mind as potentially knowing, and therefore creating, all things within itself as a model of the divine creative activity (Nicholas of Cusa later developed this line of thinking), and also on the basis of the mind not being able to know itself in the sense of defining itself because its fecund creativity has no circumscribable form or limits. In his own words:

Reason thoroughly teaches that both are true: the human mind both knows itself and does not know itself. It knows that it is; it does not know what it is. And through this, as we have taught in the prior books, the image of God is especially to be thought to be in man What is more wonderful and more beautiful to those thinking upon themselves and their God is that the human mind is to be more praised in its ignorance than in its knowledge. For it is more praiseworthy in it not to know what it is than to know that it is, just as negation is greater and more consistent than affirmation in the praise of the divine nature.²⁷

There is even a sense in which Eriugena suggests a fourth thesis to round out his negative systematics: *God does not know what humanity is*. Here a distinction is in order. Insofar as the human mind flows forth from God

in creation, Eriugena affirms that 'only the divine mind possesses in itself true knowledge of the human mind, skilled and formed in knowledge by it and for it.'²⁸ On the other hand, since the deepest reality of the human mind is found in its higher existence as the universal idea in the divine mind, in this sense it is one with God and therefore also not subject to defining knowledge *quid est*, even by God.

Eriugena's bold presentation of an anthropological apophaticism to match the traditional theological apophaticism is also found in later thinkers, such as Meister Eckhart, if not in so systematic a fashion.

Certain aspects of this forgotten aspect of Negativity I have been revived in contemporary thinkers. I note but two examples: one from the perspective of theology, the other from philosophy of religion. Karl Rahner, especially in his essay, 'Thomas Aquinas on the Incomprehensibility of God', reinvented apophatic anthropology on the perhaps surprising basis of the thought of Thomas Aquinas.²⁹

The Angelic Doctor was, to be sure, a strongly apophatic theologian. (This may come as something of a revelation to those who think Thomas had the answer to everything, but who have no patience with the subtle distinctions the Dominican employed to discriminate between what can be known, and in what ways, and what remains beyond all knowing, that is, the infinite divine essence.) The fact that there is no *quid est* knowledge of God available for creatures, either here or hereafter, is the bedrock of Thomistic theology.³⁰

Nevertheless, Rahner hit upon an overlooked point when he recognised that Thomas's teaching about God's incomprehensibility does not really deal with God as God but 'is primarily a statement about man, about his finiteness and the positive nature of this finiteness'. In other words, 'the experienced incomprehensibility of man' in our contemporary spiritual situation for Rahner is precisely the necessary path to a new appreciation of the divine unknowability.³¹ The positive payout of the human inability to know God is, for the German Jesuit, not unlike what we have seen in Eriugena's third axiom. Rahner's exploration, based on Aquinas but going beyond what the Angelic Doctor explicitly says, argues that not being able to know God is the core of a theological anthropology that

really expresses the ultimate and most radical thing about man when it understands him as the essence endowed by the gratuitous and free self-communication of God with infinite incomprehensibility and incomprehensible infinity, and thus also understands him as participating in the incomprehensibility of God.³²

Rahner's argument for the presence of an apophatic anthropology even in Thomas Aquinas suggests that this important theological tradition has been overlooked in recent centuries.

This conclusion is supported by a recent article by the philosopher of religion, Jean-Luc Marion, who addressed his inaugural lecture as the John Nuveen Professor in the Divinity School of the University of Chicago to the problem of the inability of the 'I', or 'ego', to really grasp itself in the act of knowing.³³ Marion begins from the problematic of the modern philosophical impasse between the 'I' and the 'me'. As he puts it: 'Strangely, I thus never know myself as *I* know, but always as a *me* who is known, and thus as an object. I only know myself as that which I am not, as the *me*-object.'³⁴

For Marion, however, this aporia is not a dead end, but a way to reformulate the issue by allowing the 'I' to appear as a definitive question rather than a mere object of knowledge. Here he turns to Augustine's reflections on the mystery of the self found in *The Confessions*. This issue is clearly, even poignantly, set forth in the passages where Augustine speaks of becoming a question to himself, both in his sinful days (*Factus eram ipse mihi magna quaestio*, 'I had become a great question to myself'), and in his baptised and episcopal life as *The Confessions* were being written: *In cuius oculis mihi quaestio factus sum, et ipse est languor meus* ('In your eyes I have become a question to myself, and this is my illness').³⁵

There is no space here to review the details of Marion's argument as he follows the track of anthropological incomprehensibility through western philosophy. The point is that for Marion, like Rahner, the incomprehensibility of God and the incomprehensibility of man are inseparable, both in theology and in philosophy of religion. The human impossibility of knowing self in any absolute fashion, discovered in philosophical reflection and confirmed by revelation, can be seen as, in his words,

a grace and a privilege: man remains incomprehensible, but in the image and likeness of the incomprehensible par excellence; he thus holds a derived and gracious excellence: that of knowing himself as incomprehensible.³⁶

The investigations of thinkers like Rahner and Marion suggest that serious attention to Negativity I, both in its theological and anthropological dimensions (which cannot be separated), is especially important today when quantitative, positivistic and instrumentalised views of human nature threaten to submerge any sense of the mystery of human existence, just as crudely anthropomorphic views of the 'God' of fundamentalist tribal conflict make a mockery of authentic beliefs and theologies. The issues that face us may seem academic, perhaps even esoteric, but they are real, even deadly.

Negativity II

'Detachment' is a word that flows easily from the lips, and 'releasement', or letting go, is a value in many religious traditions. Today a host of self-appointed gurus make frequent appeals to becoming detached from worldly things and selfish desire and releasing the inner person. All this is well and good, but the detachment and releasement that constitutes Negativity II is more radical, even disturbing, than what we usually mean by being detached from things. As formulated by Meister Eckhart, it often sounds fanciful, even impossible.

The treatise *On Detachment* (*Vom abegescheidenheit*) was edited by Josef Quint in the fifth volume of Eckhart's German works.³⁷ Today, critical opinion has turned against its authenticity,³⁸ but the work, which must be by a close follower, neatly summarises Eckhart's teaching on *abegescheidenheit* (literally, 'cutting-off').

The treatise begins by asking what is the one virtue that must be sought above all if we wish to find the image we once possessed in God and 'between which and God there was no distinction before ever God made created things'.³⁹ The author discusses love, traditionally the highest virtue, then humility, the foundation of all the virtues, and finally mercifulness,

so praised in the Gospels. In each case he argues for the superiority of detachment in rather daring ways.

Detachment is higher than love, he says, 'because the best thing about love is that it compels me to love God, yet detachment compels God to love me'. Detachment is better than humility, 'because although there may be humility without detachment, there cannot be perfect detachment without perfect humility'.⁴⁰ Detachment is above mercifulness because in mercy we go out to others with troubled hearts, while 'detachment remains free of this and remains in itself and allows nothing to trouble it'.⁴¹

What becomes clear is that detachment is not just another virtue, such as love and humility, but is the form, or perhaps better, the ground of all the virtues. As Robert Dobie has argued, detachment is a metaphysical virtue that perfects the soul not in respect to its own essence or operation, but with regard to its openness to God. In his words: 'detachment strips away, at least in the soul's innermost ground, all modes of knowing and existing so that it may know God as God, who exists without any mode'.⁴²

There are two keys to understanding detachment as the ground of all the virtues. The first is its total inwardness. The author of *On Detachment* does not condemn going out to others, such as we find in works of mercy; but he insists that a going out that is not based on true inner detached oneness with God will be inferior at best, dangerous at worst.

The second key to detachment's role is how it negates all created realities. Detachment is nothing but interior annihilation, that is, becoming nothing. 'Detachment approaches so closely to nothingness,' the treatise says, 'that there can be nothing between perfect detachment and nothingness'.⁴³ Such absolute self-negation allows, even compels, God to assume his rightful place in us, or rather God becomes the place where the 'I' used to be. It is only our attachment to self that crowds him out. Hence the treatise summarises its paradoxical teaching as follows:

True detachment is nothing else than for the spirit to stand as immovable against whatever may chance to it of joy and sorrow, honor, shame, and disgrace, as a mountain of lead stands before a little breath of wind. This immovable detachment brings a person into the greatest equality with God,

because God has it from his immovable detachment that he is God, and it is from his detachment that he has his purity and his simplicity and his unchangeability.⁴⁴

What the treatise is putting forth here may seem like nonsense, and indeed it would be without the important distinction made by Eckhart and also found in *On Detachment* between the inner and the outer dimensions of human existence. The outer person cannot help being in joy or in pain, as Christ was on the cross. But, insists the author, it is possible to attain an inner state that remains immovable the way the hinge of a door remains in one place as the door opens and shuts.⁴⁵ And this place is the detached nothingness in which God and spirit are one without distinction:

When this detachment ascends to the highest place, it knows nothing of knowing, it loves nothing of loving, and from light it becomes dark.⁴⁶

Eckhartian detachment, then, is not Stoic *apatheia*, or even some interior practice of distancing ourselves from created things. It is a radical reorientation achieved through realisation of the nothingness of the created self, a realisation that also implies abandoning the God who punishes and rewards.

Negativity III

The unsaying of God and human, as well as the negativity of detachment, have been linked, at least in some mystics, with the third form of negativity, the deliberate withdrawal of God experienced as dereliction. For many people there can be no clearer demonstration of God's indifference to the world, or even his inexistence, than unjust pain, suffering and death.

Here, however, I do not intend to discuss general theodicy. What I am addressing is related, but more paradoxical in nature, the conviction on the part of some believers that they have been totally abandoned by God and consigned to hell. This sense of desolation, dereliction, and even damnation is an excruciating form of divine absence and negativity.⁴⁷

The absence found in desolation, like the absence of unknowing, is present in scripture, specifically in the trials of the patriarchs of the Old Testament, the sufferings of Job, and, of course, the desolation of Jesus in Gethsemane and on the cross. Gregory the Great's massive commentary *The Moral Interpretation of Job* provides an early treatment.

According to Gregory, the path to contemplation of God in this life begins and ends in fear. The closer we come to God, the more we are plunged into dread. Commenting on Job 4:13 (Eliphaz's seeing God 'in the horror of a vision by night'), he says, 'The human soul is lifted high by the engine of its contemplation so that the more it gazes on things higher than itself the more it is filled with terror.'⁴⁸ The most powerful expositions of such desolation are to be found among late medieval mystics and, in a somewhat different way, in Luther's sense of *Anfechtung*, that is, the terror before the face of the God who hides himself *subcontrariis* and in his mysterious predestinating will.⁴⁹

Many late medieval women mystics made the experience of desolation and estrangement from God central to their teaching. Examples can be found in Angela of Foligno, noted above, and in such figures as Marguerite Porete (d. 1310), Mechthild of Magdeburg (d. c. 1280), and in Caterina Vigri (d. 1463). We also find it among women mystics of the early modern period, such as the Ursuline nun Marie de l'Incarnation (d. 1672) and the controversial French aristocrat and Quietist Madame Guyon (d. 1717). Mechthild's *Flowing Light of the Godhead*, for example, discusses how 'sinking humility' brought the beguine down to the lowest place possible, described as 'under Lucifer's tail' (*under Lucifers zageh*).⁵⁰ *Flowing Light* 4.12 presents an even more powerful account in the form of a dialogue between the soul as bride and Christ the Bridegroom. When Christ departs from the soul, she refuses to take any consolation from creatures and is therefore rewarded by being drawn into the Trinity. But after eight years of this delight the soul begs, 'Oh, leave me, dear Lord, and let me sink further for your honour.' Then both the beguine's soul and her body enter a darkness without light where she loses any sense of intimacy with God. In this state she welcomes the personification of 'Constant Estrangement from God' and lets God take delight from her while she receives only an estrangement from him that causes her body to sweat and writhe in painful cramping.⁵¹

This form of absence is also found among male mystics, such as Jacopone da Todi in the thirteenth century, John Tauler in the fourteenth century, and John of the Cross in the sixteenth. Tauler might be described as the foremost theorist of mystical dereliction, a mode of negativity he described by such terms as *getrenge*, *verlossenheit* and *arbeit der nachte*.⁵²

Like Eckhart, Tauler made the imitation of Christ's passion central to his mysticism, but his was not the imitation of bloody self-torture found in many late medieval mystics. The essence of following Christ to Calvary, for Tauler, rests in total surrender of the will. One of the stages on this path that the preacher seems to have thought would come to all serious followers of Christ, in one way or another, was that of dereliction and affliction. In Sermon 39, for example, he discusses three stages on the path to God. The first describes how the devout God-seeker is refreshed and fortified by the milk of spiritual sweetness in order to be made ready for the stronger food. In the second stage, according to Tauler:

A person is led along a very wild path, totally dark and foreign. On this road God takes away from him everything that he ever gave him. The person is left so much alone that he knows nothing of God, and he comes into such distress [*getrenge*] that he is not sure if he was ever right, or if he ever had a God or not, even whether he really exists or not. He is so strongly afflicted that the whole world seems too narrow for him.⁵³

Tauler, like other mystics, counsels those who are undergoing such a form of painful absence to cling to the rock of faith. In a sermon on the parable of the woman with the ten drachmas (Luke 15:8–10), the preacher interprets the woman as God seeking the lost coin of the soul imprinted with the divine image. The lantern with which God searches is the light of love that gleams forth in Christ's humanity, which, we need remember, was abandoned by God on the cross. Looking to Christ as the example of the dereliction of love he says:

This is love, that a person is on fire in seeking and in lacking, and in a feeling of being abandoned [*verlossende*]. One remains in constant torment, but content to be tormented. In this torment a person is melted and

consumed by the fire of desire; yet is in equal contentment. This is love.
It is not what you imagine it to be.⁵⁴

In a similar, if non-mystical, key Luther made God's absence central to his message of the restoration of evangelical faith. Commenting on Psalm 6:4 ("Turn, O Lord, save my life"), the reformer notes the pain that comes from God's turning away from us:

A turning away on God's part implies an inner rejecting and forsaking.
Then a horrible terror and, as it were, the beginning of damnation, is felt.⁵⁵

Concerning the dread and horror of conscience that believers experience before the face of God's judgements, Luther says in another Psalm commentary: 'All other temptations are little exercises and preludes to this consummate one. In them we get used to fleeing to God against God.'⁵⁶

Luther found this experience particularly necessary for theologians. As he put it in yet another Psalm comment: 'By living, yet more by dying and being damned, you become a theologian, not by understanding, reading, and speculating.'⁵⁷ For Luther, it was necessary to undergo the temptations and abandonment experienced by the patriarchs, by Job, and especially by Jesus on the cross, to begin to break down our human self-confidence and to take hold of God in the naked faith needed for salvation.

Similar forms of alienation, dereliction and estrangement have been found among seekers after God over the past five centuries. One might even say that dereliction and estrangement have been among the characteristic modes of religious existence during the past hundred years and more. A good example can be found in Thérèse of Lisieux, the Carmelite nun declared the third female Doctor of the Church by Pope John Paul II in 1997.

Thérèse's final months (1896–7), as she was dying of tuberculosis, were marked by a trial of unfaith in which the thought of heaven, formerly so consoling to her, became a 'cause of struggle and torment' to such a degree that she feared to blaspheme when she wrote about it.⁵⁸

A more secular witness can be found in Simone Weil (d. 1943). Weil

emphasised the central role of what she called affliction (*malheur*) in her analysis of the human condition. While all humans experience suffering and the general misery of existence, 'affliction' is more a condition of utter degradation and humiliation, both interior and exterior, one that destroys our hope for natural joy and brings contempt and revulsion from onlookers.⁵⁹

While affliction is not presented by Weil as an explicit experience of God's withdrawal, as we have seen with the medieval mystics, for this philosopher and social critic it may be described as a possible way to God insofar as affliction destroys the world of selfish attachment in which we are trapped. A passage from volume one of her *Notebooks* says:

It is attachment which produces in us that *false reality* (ersatz form of reality) connected with the outside world. We must destroy that ersatz form of reality in ourselves in order to return to the true reality. No doubt extreme affliction produces this far more surely than any religious practices (Job. The Cross).⁶⁰

It is not possible here to engage in a real analysis of Weil's rich teaching on affliction, or to try to compare it with the teaching of the Christian mystics on detachment and estrangement.⁶¹ It is worth noting, however, that one of Weil's two explicit references to Meister Eckhart in her writings cites his teaching on the uncreated something in the soul in relation to affliction. This passage appears in her *First and Last Notebooks*:

The only part of our soul which is not a fit subject of affliction is the part which is situated in the other world. Affliction has no power over it—for perhaps, as Meister Eckhart says, it is uncreated—but it has the power to sever it violently from the temporal part of the soul, so that, although supernatural love dwells in the soul, its sweetness is not felt. It is then that the cry breaks out, 'My God, why hast thou forsaken me?' [Ps. 22:1].⁶²

The painful sense of affliction and alienation found among many religious seekers over the past century would not have surprised the medieval mystics who perceived God as the source of their pain and affliction.

Their witness serves to remind us that a God who is only God for our own enjoyment and pleasure is as false a God as the God who can be measured by human words and concepts.

Conclusion

The pursuit of the unknowable is an irreducible aspect of the human condition, found throughout the world's religions (and sciences as well). If God is ultimately unknowable, however, Christian mystical theology, basing itself on humanity's creation in the image and likeness of God, has made the equally bold claim that human nature is also fundamentally a mystery, however much recent biological research has opened up realms of knowledge undreamt of even a decade ago.

Mystical wisdom, especially the 'learned ignorance' (*docta ignorantia*) of the great apophatic thinkers, is not opposed to physical, chemical and biological science. It operates on another dimension. Science (*scientia*) and wisdom (*sapientia*) cannot be reduced to one common form of knowing, but the two ways of knowing must try to remain in constant, if uneasy, dialogue about the meaning of being human.

Perhaps the most important message to be gained from the teaching of the mystics on the forms of negativity briefly set forth here is that the scientific desire to know, so integral to human experience, is not the whole story. Along with the desire to know what we can know of God, the universe, and human nature, the mystics remind us that we should also yearn for the higher wisdom that begins by unknowing the known about God and ourselves. Like Abraham, at some stage we must be ready to destroy our idols before setting off on the journey to the promised land.

In undertaking this journey it is helpful to recognise that the negativity of unsaying, or learned ignorance, is only one part of a triple package (as Negativity I). Desire, especially the desire for God, needs to be no less radically negated than thinking in order to begin to appreciate the radical otherness of God (Negativity II). God is not just another object of knowledge, or another object of desire. Knowing things and wanting things –

even God as the *thing* that brings us delight and ultimate satisfaction – is not sufficient.

Finally, given the ungovernable pride of human knowing and the insatiability of human desire, the mystical tradition witnesses to the salutary corrective found in the third form of negativity – dereliction or Negativity III, the painful absence that helps break down the selfishness that blocks our way towards the radically other God we should seek in such a way that we never find him, as Meister Eckhart put it.

Notes

- 1 Simone Weil, *The Notebooks of Simone Weil*, trans. Arthur Wills, 2 vols (London: Routledge & Kegan Paul, 1976), 1:239–40.
- 2 On the relation of the two thinkers, see Martin Andic, ‘Weil and Eckhart’ (unpublished essay); I thank the late author for permission to cite this paper.
- 3 Eckhart’s writings will be cited from the critical edition, *Meister Eckhart: Die deutschen und lateinischen Werke herausgegeben im Auftrag der deutschen Forschungsgemeinschaft* (Stuttgart and Berlin: Kohlhammer, 1936–). The Latin works will be noted as LW with appropriate volume and page; the German works as DW. This text is from Predigt (hereafter Pr.) 15 (DW 1:253).
- 4 Louis Dupré, ‘Spiritual Life in a Secular Age’, *Daedalus*, 111(1982): 21–31 (quotation at 25). See the updated version of this paper, ‘Spiritual Life and the Revival of Christianity. Reflections at the End of the Millennium’, *Cross Currents*, Fall (1998): 381–90.
- 5 On the notion of ‘unsaying God’, see the stimulating work of Michael A. Sells, *Mystical Languages of Unsaying* (Chicago: University of Chicago Press, 1994).
- 6 On the history of apophaticism in Christian theology and mysticism, see *Prudentia. Supplementary Number 1981. The Via Negativa: Papers on the History and Significance of Negative Theology*, ed. D. W. Dockrill and Raoul Mortley (Auckland: Auckland University Press, 1981); Raoul Mortley, *From Silence to Word II: The Way of Negation, Christian and Greek* (Bonn: Peter Hanstein, 1986); Denys Turner, *The Darkness of God: Negativity in Christian Mysticism* (Cambridge: Cambridge University Press, 1995); Deirdre Carabine, *The Unknown God. Negative Theology in the Platonic Tradition: Plato to Eriugena* (Louvain: Peeters, 1995); Daniel Howard-Snyder and Paul K. Moser, eds, *Divine Hiddenness: New*

- Essays* (Cambridge: Cambridge University Press, 2002); and Oliver Davies and Denys Turner, eds, *Silence and the Word. Negative Theology and Incarnation* (Cambridge: Cambridge University Press, 2002).
- 7 Among the important recent retrievals of Dionysianism, see Jean-Luc Marion, *God without Being* (Chicago: University of Chicago Press, 1991); Fran O'Rourke, *Pseudo-Dionysius and the Metaphysics of Aquinas* (Leiden: E. J. Brill, 1992); Jan Miernowski, *Le Dieu néant: Théologies négatives à l'aube des temps modernes* (Leiden: E. J. Brill, 1998); Thomas A. Carlson, *Indiscretion. Finitude and the Naming of God* (Chicago: University of Chicago Press, 1999); J. P. Williams, *Denying Divinity: Apophasis in the Patristic Christian and Soto Zen Buddhist Traditions* (Oxford and New York: Oxford University Press, 2000); and Christos Yannaras, *On the Absence and Unknowability of God: Heidegger and the Areopagite* (London and New York: T&T Clark, 2005).
 - 8 See the many papers in Vincent L. Wimbush and Richard Valentasis, eds, *Asceticism* (New York: Oxford University Press, 1995).
 - 9 Turner, *The Darkness of God*, p. 179.
 - 10 Eckhart, Sermon Jostes 82, trans. Oliver Davies as *Meister Eckhart: Selected Writings* (London: Penguin Books, 1994), p. 244. Similar expression are found in other Eckhart sermons, e.g., Pr. 12 (DW, 1:196), and Pr. 52 (DW, 2:502). Pure release-ment was also stressed by Eckhart's followers, though not all use his radical notion of releasing even God. See, for example, John Tauler, *Die Predigten Taulers*, ed. Fernand Vetter (Berlin: Weidmann, 1910), Sermon 25, p. 306, and the *Book of Spiritual Poverty* I.61 (*Das Buch von geistliche Armuth*, ed. Heinrich Denifle [Munich: Huttler, 1877], p. 30).
 - 11 See *Il Libro della Beata Angela da Foligno (Edizione critica)*, ed. Ludger Their, OFM and Abela Calufetti, OFM (Grottaferrata: Editiones Collegii S. Bonaventurae, 1985), *Memoriale*, ch. 8, n. 25 (ed., 336.52).
 - 12 *Memoriale* (ed. 340.54).
 - 13 *Marguerite Porete. Le Miroir des Simples Ames*, ed. Romana Guarneri and Paul Verdeyen, SJ, Corpus Christianorum, Continuatio Mediaevalis, LXIX (Turnholt: Brepols, 1986), ch. 11, p. 44.
 - 14 For more extended treatments of Marguerite and the literature devoted to her, see M. Sells, *Mystical Languages of Unsaying*, chs 5 and 7; Amy Hollywood, *The Soul as Virgin Wife: Mechthild of Magdeburg, Marguerite Porete, and Meister Eckhart* (Notre Dame: University of Notre Dame, 1995), chs 4 and 7; and Bernard McGinn, *The Flowering of Mysticism. Men and Women in the New Mysticism (1200-1350)* (New York: Crossroad-Herder, 1998), pp. 244-65.
 - 15 Augustine, *De doctrina christiana* 1.13, as found in *Sancti Aureli Augustini Opera*,

- Sect. 6, Pars 6: *De Doctrina Christiana*, ed. William Green, Corpus Scriptorum Ecclesiasticorum Latinorum, LXXX (Vienna: Hoelder-Pichler-Tempsky, 1963), 11.
- 16 Augustine, *Sermo* 117.3.5 in *Patrologia Latina* (hereafter PL) 38:663.
- 17 Gregory of Nyssa, *The Life of Moses*, Book II.165 (New York: Paulist Press, 1978), 96.
- 18 John of the Cross, *Dark Night of the Soul*, II.17.8, as found in *The Collected Works of St. John of the Cross*, trans. Kieran Kavanaugh, OCD, and Otilio Rodriguez, OCD (Washington, DC: ICS Publications, 1991), p. 438.
- 19 John Henry Newman, *Parochial and Plain Sermons*, 8 vols (London: Rivingtons, 1878–82), vol. 6, p. 248.
- 20 Karl Rahner, *The Great Church Year* (New York: Crossroad, 1993), ‘Lent: My Night Knows No Darkness’, p. 117.
- 21 The Cappadocian emphasis on divine infinity was a key weapon in their struggle against the Arian doctrine of a limited God taken over from classical metaphysics. See Ekkehard Mühlenberg, *Die Unendlichkeit Gottes bei Gregory von Nyssa. Gregors Kritik am Gottesbegriff der klassischen Metaphysik* (Göttingen: Vandenhoeck & Ruprecht, 1966). On Gregory’s apophaticism, see also Hans Urs von Balthasar, *Presence and Thought: An Essay on the Religious Philosophy of Gregory of Nyssa* (San Francisco: Ignatius, 1995), which notes his negative anthropology on pages 93–94; and John Saward, ‘Towards an Apophatic Anthropology’, *Irish Theological Quarterly*, 41 (1974): 222–34.
- 22 Gregory of Nyssa, *De opificio hominis*, XI.3–4, in *Patrologia Graeca* (hereafter PG) 44:156B. For John Scottus Eriugena’s translation of this passage, see M. Cappuyns, ‘Le ‘De imagine’ de Grégoire de Nysse traduit par Jean Scot Érigène’, *Recherches de théologie ancienne et médiévale*, 32 (1965): 220–1.
- 23 From *Select Writings and Letters of Gregory, Bishop of Nyssa*, trans. William Moore and Henry Austin Wilson. *A Select Library of Nicene and Post-Nicene Fathers. Second Series*, vol. 5 (Grand Rapids, MI: Eerdmans, 1976), pp. 396–97.
- 24 On Eriugena’s negative anthropology, see Bernard McGinn, ‘The Negative Element in the Anthropology of John the Scot’ *Jean Scot Érigène et l’histoire de la philosophie*, ed. René Roques (Paris: CNRS, 1975), pp. 315–25; as well as Dermot Moran, *The Philosophy of John Scottus Eriugena* (Cambridge: Cambridge University Press, 1989), especially ch. 10; and Willemien Otten, *The Anthropology of Johannes Scottus Eriugena* (Leiden: Brill, 1991).
- 25 Johannes Scottus Eriugena, *Periphyseon*, Book I. I will cite here in reference to the edition in PL 122 where this text is found at c. 589B (the more recent critical editions contain the PL column numbers).

- 26 *Periphyseon*, I (PL 122:593C).
- 27 *Periphyseon*, IV.7 (PL 122:771BC).
- 28 *Periphyseon*, IV.7 (PL 122:768A).
- 29 Karl Rahner, 'Thomas Aquinas on the Incomprehensibility of God,' *Celebrating the Medieval Heritage. A Colloquy on the Thought of Aquinas and Bonaventure*, ed. David Tracy (*Journal of Religion*, 58, Supp. 1978): S107-S125.
- 30 On Thomas's insistence on the impossibility of a creature ever knowing God's essence, see, e.g., *Summa theologiae* Ia, q.2, a.1; and *In Boethium De trinitate* q.1, a.2, ad 1.
- 31 Rahner, 'The Incomprehensibility', S116–17.
- 32 *Ibid.*, S115.
- 33 Jean-Luc Marion, '*Mibi magna quaestio factus sum*. The Privilege of Unknowing', *Journal of Religion*, 85 (2005):1–24.
- 34 Marion, '*Mibi magna quaestio*', p. 4.
- 35 The first passage is from *Confessiones* 4.4.9; the second from 10.33.50.
- 36 Marion, '*Mibi magna quaestio*', p. 23.
- 37 *Vom abegescheidenheit* can be found in DW 5:400-34. I will use the translation of E. Colledge in Colledge and McGinn, *Meister Eckhart: Essential Sermons, etc.* (New York: Paulist Press, 1981), pp. 285–94. For a recent study of Eckhart on detachment, see Robert Dobie, 'Meister Eckhart's Metaphysics of Detachment', *The Modern Schoolman*, 80 (2002): 35–54.
- 38 See, for example, Kurt Ruh, *Geschichte der abendländische Mystik*, vol. 3: *Die Mystik des deutschen Predigerordens und ihre Grundlegung durch die Hochscholastik* (Munich: C.H. Beck, 1996), pp. 355–8.
- 39 'On Detachment', in Colledge-McGinn, *Meister Eckhart*, p. 285.
- 40 *Ibid.*, p. 286.
- 41 *Ibid.*, p. 287.
- 42 Dobie, 'Meister Eckhart's Metaphysics of Detachment', pp. 48–9.
- 43 'On Detachment', in Colledge-McGinn, *Meister Eckhart*, p. 286.
- 44 *Ibid.*, p. 288.
- 45 *Ibid.*, p. 291.
- 46 *Ibid.*, p. 292.
- 47 Some of what follows here depends on my more detailed study of this aspect of negativity in Bernard McGinn, '*Vere tu es Deus absconditus*: the hidden God in Luther and some mystics', in *Silence and the Word*, pp. 94–114.
- 48 *Moralia in Iob* 5.31.55 as found in *Corpus Christianorum* 143:258.
- 49 On Luther, see B. A. Gerrish, "'To the Unknown God": Luther and Calvin

- on the Hiddenness of God', *Journal of Religion*, 53 (1973): 263–92; and McGinn, 'Vere tu es Deus absconditus', 94–100.
- 50 *Mechtbild of Magdeburg: The Flowing Light of the Godhead*, trans. and intro. Frank Tobin (New York: Paulist Press, 1998), Book 5.4, p. 183.
- 51 *Ibid.*, pp. 152–6.
- 52 Dereliction/affliction is the second stage in Tauler's threefold itinerary to union (ecstasy-affliction-identity). For a clear presentation, see Tauler, *Die Predigten Taulers*, ed. Vetter, Sermon 39, pp. 159–60. For studies of Tauler's view of affliction, see McGinn, 'Vere tu es Deus absconditus', pp. 110–13; and especially Alois M. Haas, "Die Arbeit der Nacht". *Mystische Leiderfahrung nach Johannes Tauler*, in *Die Dunkle Nacht der Sinne: Leiderfahrung und christliche Mystik*, ed. Gotthard Fuchs *et al.* (Düsseldorf: Patmos, 1989), pp. 9–40.
- 53 Tauler, *Die Predigten Taulers*, ed. Vetter, Sermon 39, p. 161.
- 54 *Ibid.*, Sermon 37, p. 143.
- 55 Translation from *Luther's Works*, ed. Jaroslav Pelikan *et al.* (St Louis: Concordia, 1959–), vol. 14:142–3.
- 56 Luther, *Operationes in Psalmos* 6:2, as found in *D. Martin Luthers Werke, Kritische Gesamtausgabe* (Weimar: Böhlau, 1883–; hereafter WA), vol. 3:204.
- 57 Luther, *Operationes in Psalmos* (WA, 5:163.26–9).
- 58 *Story of a Soul: The Autobiography of St. Thérèse of Lisieux*, 3rd edn, trans. John Clarke (Washington, DC: ICS Publications, 1996), pp. 210–14. See Jean-François Six, *Light of the Night: The Last Eighteen Months of Thérèse of Lisieux* (Notre Dame, ID: University of Notre Dame, 1998).
- 59 Simone Weil, *Intimations of Christianity Among the Ancient Greeks* (Boston: Beacon Press, 1958), p. 180.
- 60 Weil, *Notebooks*, 1:313.
- 61 For Weil's teaching on affliction, see Eric O. Springsted, *Christus Mediator: Platonic Mediation in the Thought of Simone Weil* (Chico, CA: Scholars Press, 1981), pp. 71–104; and Miklos Vetö, *The Religious Metaphysics of Simone Weil* (Albany, NY: SUNY Press, 1994), pp. 70–88.
- 62 Simone Weil, *First and last Notebooks*, translated by Richard Rees (London and New York: Oxford University Press, 1970), p. 136.

On Clouds and Veils: Divine Presence and ‘Feminine’ Secrets in Revelation and Nature

Sarah Coakley

Introduction and statement of theses

The purpose of this chapter is to unravel some of the complex associations of the metaphors of ‘cloud’ and ‘veil’ in Jewish and Christian traditions. The aim is to indicate how Moses has figured archetypally, for both traditions, as a special locus of divine presence – and yet also, and paradoxically, of simultaneous divine occlusion. In Moses’s story in Torah, God is both uniquely revealed and uniquely hidden: his ‘glory’ is shielded by cloud (see Exod. 24:15–18), and also covered by a veil (see Exod. 34:29–35). If we seek to explicate the subtlety of the relation of divine revelation and divine hiddenness in Jewish and Christian traditions, then, we are necessarily drawn to these themes in Exodus, and to their subsequent – and varied – interpretations in both Judaism and Christianity. Here, if anywhere, are key Western *exegetical* axes for the modern scientific interest in ‘knowing the unknowable’. But it is a complex story to trace these metaphors from biblical base to modern scientific expression, and several surprising twists and turns occur along the way.

In this chapter we will attempt a selective, but illustrative, account of the exegetical history of these themes, in four moves. A brief enunciation of our main theses at the outset may aid clarity, given the complexity of the material involved.¹

First, we will attend to the themes of cloud and veil in the text of Exodus itself, and in a selection of rabbinic commentaries upon it. Here we shall see that the question of whether direct human interaction with the deity is possible (without risk of instantaneous death) is already a point of contention even within the Hebrew sources woven into the *textus receptus* of the Torah; and in early rabbinic discussion even greater squeamishness is evidenced in relation to the problem of Moses's direct access to the divine. Further, and correlatively, the exact reason for Moses's donning of a veil is also found perplexing from the start: there is surprisingly little rabbinic reflection on the veil itself, but what extended discussion there is shows a prime interest in Moses as a mediatorial figure restored in his 'image' to what God originally intended for human creation, and thus sharing directly, dangerously, and *uniquely*, in the divine revelatory 'glory'.

This story of the place of Moses as pre-eminent human locus of divine presence was therefore, and unsurprisingly, not immune from the earliest forms of Christian supersessionism. And here we come to the second set of conclusions to be drawn from this exegetical history of clouds and veils. Already in the theology of Paul (2 Cor. 3:7–18), Moses's veil was interpreted as that which hides a fading revelation which must necessarily give way to the superior 'glory' of Christ; and this bold subordinating move may well account for much of the silence about Moses's veil that we subsequently find in the Jewish sources. We might also expect to see Moses's complete eclipse at this point in the history of Christian reflection on divine presence, given the negative Pauline reading of his veil; yet instead, in early patristic marriages between Platonism and Christianity, Moses triumphantly reappears (courtesy of the mediating inspiration of the Jewish Platonist, Philo) as the 'type' of the true *Christian* contemplative who communes with God in the divine darkness of the cloud. So here we find, in the early Christian exegesis of the figure of Moses, an interesting and revealing disjunction: the veil is read negatively, for the most part;² but simultaneously the cloud becomes, at least in some influential Platonising authors, redolent with 'mystical' meaning. Soon, in fact, the cloud was to be read – in the writings of the sixth-century 'pseudo-Dionysius' – to express an *intrinsic* mental impenetrability of divine presence, rather

than of the safe shielding of it from direct human gaze, a reading with enormous importance for later Western Christian 'negative theology'.³ Hence this exegetical history of Christian readings of clouds and veils surprisingly escapes a *crude* form of supersessionism, thanks to certain inversions of Pauline intent in the apophatic traditions of Christianity. As in rabbinic thought, Moses remains the primary 'type' of the one who meets God directly, dangerously, intimately, yet to some degree himself uncomprehendingly.

Even to chart the first two dimensions of this story, therefore, is to discover a greater congruence between Jewish and Christian thought on the central theme of revelatory hiddenness than one might initially imagine. Moses stands on the *limen* between what can – and cannot – be known of God, with all the power and ambiguity that that position bespeaks. The various traditions of Christian mystical theology which reflected on this power and ambiguity in terms of the cloud metaphor probably owed more to Jewish exegetical forebears, especially Philo, than they were conscious of themselves; and so, *despite* Paul, and despite rampant emerging forms of anti-Judaism in the western medieval period, this 'divine darkness' tradition in mystical theology kept Moses centre-stage, and to a remarkable extent even thereby avoided competitive stands on christological matters.⁴

But there was another, and third, dimension to this story which had been implicit – or so I shall argue – even in Paul's discussions of veils, and became the more explicit in rabbinic reflection on Moses once he was connected with commentary on the *Song of Songs*. This was the matter of the entanglement of certain themes of 'femininity', and of erotic intimacy, with the key question of divine presence and concealment in the story of Moses. And so the ambivalence we have already noted about direct contact with the divine was mirrored in another, and connected, ambivalence: about gender, about the special place of 'femininity' in such direct contact, and about what this meant not just for the male prophet or sage, but for women themselves. If Moses is veiled, is he not in some sense made 'feminine' to God as the particular human locus of divine presence (thereby rendering 'femininity' newly authoritative)? Or is it, in contrast, that *actual* women do not share in this authority, but instead suffer

a different, subordinated, fate in their veiled status? Strikingly, minority elements in both Jewish and Christian tradition could converge on the first alternative, as we shall attempt to show: Moses is at times ‘feminised’ by both traditions as a sign of his ambivalent revelatory power. And once we read, as I propose below, Paul on Moses’s veil *in connection with* Paul on women’s veiling in church (1 Cor. 11:1–16), a concatenation of what we might call ‘proto-rabbinic’ associations fall out of the Pauline text, with fascinatingly ambiguous implications for the status of Christian women. They are lauded with a new ‘authority’ by Paul (see 1 Cor. 11:10), equivalent, I shall argue, to the restored ‘image’ of Israel before the Law; but simultaneously they are relegated to a position subordinated to Christian male ‘headship’. Thus we see that the veil, in a subtly different history from that of the cloud, can, when explicitly related to gender, connote both divinely ordained authority and divinely ordained subordination.⁵

A fourth, and concluding, twist in our argument comes when we see how the metaphor of ‘feminine veiling’ undergoes yet a further transformation (indeed inversion) at the birth of modern science, yet not without remaining echoes of the biblical heritage. What is now veiled is the ‘feminine’ Nature that the modern male scientist takes as his bride. (The biblical story of Moses’s veil, as we shall see, at this juncture becomes curiously elided with the pagan Greek story of the veil of Artemis.⁶) What was previously God’s place to reveal or probe is abrogated by the modern scientific investigator; ‘revelation’ is now a matter of the *scientific* laying bare of the secrets of the natural world and the making of ‘her’ a fruitful bride and loyal wife. Hence the history of clouds and veils reaches here a characteristically modern *dénouement*, with the apparent dispersal of noetic darkness (the cloud), but the maintenance of a remaining ‘feminine’ mysteriousness in Nature (the veil). Nonetheless, modern and contemporary science has still continued to use the metaphor of cloud with surprising regularity, both to connote scientific nescience and also to make remaining suggestive allusions to divine mystery. In that sense, and paradoxically, the mystical tradition of ‘unknowing’ still laps at the edges of contemporary scientific sensibility, even as its modernistic confidence claims to have rent the veil of pre-scientific ignorance. And the extent to which ambivalence about gender also continues to attend this nexus of

associations is a matter still worthy of reflection, and one to which we shall return in closing.

Such are the four strands of tradition on clouds and veils that this chapter will attempt first to distinguish and elucidate, and then finally to braid together again. Taken cumulatively, these strands show the surprising staying-power of biblical metaphor, even when displaced into the supposedly secular discourses of modern science. But they also show that metaphors for *unspeakable* divine presence, multivalent as they are in their evocations, have the capacity to evade or undercut familiar doctrinal disjunctions both within and between traditions, and even to reconfigure expectations about the supposedly fixed 'binary' of gender. To some of the details of this complex story on clouds and veils we now turn.

I: Cloud and veil in Exodus and its rabbinic interpretation

The book of Exodus is itself the product of the redaction of several sources, and one of the most puzzling and unresolved theological issues that the Massoretic text bequeaths to the reader concerns the possibility – or otherwise – of direct visual relation to the deity. 'Cloud' and 'veil', in their different ways, seem to indicate the need for God's 'glory' (*kavod*) to be *protected* from direct human gaze – and vice versa;⁷ yet in more than one puzzling way this logic is abrogated in the text as a whole. To a significant degree the riddle may be solved, in modern source-critical terms, by recognising that different strands of the text come from different authors and sources.⁸ Thus, for instance, there is general scholarly agreement that both the 'cloud' and 'veil' motifs come from the 'Priestly' source ('P'), writing originally sometime in the sixth–fifth century BCE. The interests of 'P' in divine 'glory', in ritual exactitude, in priestly Aaronic purity, and in Moses's yet more special status as *alone* worthy of unique and direct intercourse with God in the giving of the Law (see Exod. 24:15–18), all cohere with the concern for the 'covering' of the divine 'glory' which is a persistent motif of the Priestly compiler.⁹ However, to allocate to 'P' the crucial passages on clouds and veil does not, in and of itself, solve all the inherent theological problems that arise in the text of Exodus about

the ambivalent power of divine presence, even in 'P' alone.¹⁰ To probe these problems, as the rabbis also did (with characteristic ingenuity and richness of imagination), is to be forced to acknowledge that cloud and veil, although ostensibly parallel motifs, are neither *consistently* operative in the protection of divine mystery, nor is their status as coverings of divine 'glory' completely *égal*. Two features of the Exodus text are particularly worthy of critical attention for our purposes.

First, although Exodus 24 contains at least two, and probably three, strands of tradition artfully woven together to suggest a *gradation* of ascents up Mt Sinai,¹¹ the cloud motif characteristic of 'P' that ends the chapter really does not fit easily alongside what has just preceded it. For there is the extraordinary statement in the (apparently ancient¹²) fragment of tradition preserved in Exodus 24:9–11, that 'Moses and Aaron, Nadab and Abihu' ascended the mountain, and '*saw the God of Israel*' and '*beheld God*, and ate and drank',¹³ and this is in obvious contrast to the 'P' tradition that follows it at the end of the chapter (Exod. 24:15b–18), which not only gives to Moses alone the honour of ascending the mountain, but insists that he does this *in 'cloud'*. Since elsewhere in Exodus (e.g., 19:21; 33:18, 20) and Leviticus (16:1–2) we learn of the mortal dangers of confronting God face to face, Exodus 24:9–11 represents a certain theological surd that demands special explanation, not least in relation to the 'P' cloud tradition: are we to see Moses here also in *direct* contact with the divine, or not? And if so, who is being protected from what by the cloud (is Moses also shrouded protectively *within* the cloud, or is it only the other Israelites who need distance, whilst Moses attains an otherwise unheard of, even 'godlike', intimacy with the divine¹⁴)?

Secondly, the tradition of Moses's veil (Exod. 34:29–35), also from 'P', is equally perplexing in relation to our key question about divine revelation and hiddenness; for on close inspection it is not entirely clear what the veil is meant to achieve, either. It is not that Moses veils himself to speak directly to God,¹⁵ nor, on the other hand, to protect the people at all times from the radiance of his mediatorship. Rather, the veil is simply put on *in between times* of communication with God and Israel (when he is 'off duty', as a colleague at the Hebrew University has put it¹⁶), such that why Moses veils himself, and on behalf of whom, remains some-

what opaque. So the questions that press are these: how are we to understand the apparent inconsistency about direct divine contact in Exodus 24, in particular as it relates to the theme of Moses in the cloud? What sort of contact does Moses have with God even *in* the cloud? And what exact purpose is performed, later in Exodus 34, by the veil of Moses, if it (seemingly) does not protect or hide him in relation to God or the Israelites?

The rabbis were to manifest a variety of somewhat puzzled responses to these intriguing and problematic dimensions of the text.¹⁷ Whilst in general they tend to heighten the unique status of Moses before God, they recoil from any dangerously idolatrous suggestion of a direct *perception* of God.¹⁸ The targums, for instance, all balk at the astonishing Exodus 24:10: it cannot be, for them, that all four men ‘*saw the God of Israel*’, but rather (*Targum Onqelos*) that ‘they saw the *glory* of the God of Israel’,¹⁹ or (*Targum Neophyti*) ‘they saw the glory of the *Shekinah* of the Lord’,²⁰ or (*Targum Pseudo-Jonathan*) ‘Nadab and Abihu lifted up their eyes and saw the glory of the God of Israel’.²¹ Even the Septuagint had already resorted to periphrasis, translating Exodus 24:10 as ‘they saw *the place* where the God of Israel stands’²² (an evasion that was later to be taken over in a similar phrase in the pseudo-Denys²³). Not that such one-(or two-) step removals from direct divine contact could thereby eliminate danger, as later rabbinic commentaries indicate. Leviticus Rabbah (XX. 10, *ad* Lev. 16:1, on the death of Aaron’s sons) explains that Moses only himself escaped death, despite Exodus 24:10 and the dangerous direct contact there with the *Shekinah*, because he had earlier ‘hid[den] his face’ (see Exod. 3:6) when confronted with God’s presence at the burning bush.²⁴ Numbers Rabbah (XI.3, *ad* Num 6:23) explains, in contrast, that, before Israel sinned in worshipping the golden calf, they *could* look on the ‘glory of the Lord . . . like devouring fire on the top of the mount’ (Exod. 24:17) ‘undaunted and undismayed’; but after their sin, ‘they could not even look at the face of the intermediary [i.e., Moses, without a veil]’.²⁵ This last interpretation directly links, at least by implication, the theological significance of cloud and veil: both shield Israel from too dangerous a direct contact with their God. Yet that leaves Moses, of course, in a unique mediatorial position, commented upon in the *Pesikta Rabbati* (Piska 10) in

the following way that is one of the only extended and convincing rabbinic attempts to explicate the mysterious function of his 'veil': the veil is put on because Moses's original human 'glory' has been *restored* before God, and 'even as a man cannot look at the sun as it rises, so no man could look at Moses, until Moses put a veil on his face' (in Exod. 34:33). But this caused resentment, Piska 10 goes on, because the rest of Israel was in disgrace; it caused Moses to go back to 'the Holy One' and plead that the 'head' and 'glory' of all Israel would also be 'lifted up'. Then 'The Holy One, blessed be He, replied: "Go, lift up their heads."' ²⁶

Even this small, selective smattering of rabbinic commentary indicates the strong remaining ambivalence, even outright recoil, created in rabbinic discussion by the idea of direct human contact with the divine: huge *moral* danger is evoked by such temerity. That Moses is a special case thus requires equally special treatment: the power he evinces tilts dangerously towards idolatry,²⁷ even as he bears the almost 'incarnational' responsibility for reordering the status of Israel's 'headship' after the primal sin of the golden calf incident.²⁸ Although the precise ways in which the cloud or veil do, or do not, protect Moses himself from direct contact with the divine remain obscure in the text, the responsibility of Moses to bear the full weight of this ambivalence – of seemingly embodied divine presence, yet of stark moral judgement on the shame of idolatry – is hauntingly evoked by the narrative and by its puzzled rabbinic interpreters.²⁹

II: Paul and the superseded veil: the Christian disjunction between veil and cloud

We can hardly be surprised that early Christianity was to tackle this Mosaic ambivalence christologically. Coming to Paul (and his supersessionist reading of Exod. 34 in 2 Cor. 3:7–18), after a quick immersion in the rabbinic material, makes one newly aware of the daring nature of Paul's moves, but also of the striking coincidence of much of the technical *language* of Paul and the later rabbinic traditions. We have noted how the rabbis were to be both puzzled, yet almost wholly literal, in their reading of the Exodus texts. Paul, in contrast, reads Moses's veil allegorically and negatively, as

hiding in Moses 'the end of the glory' of the old covenant that was being 'set aside' (vs. 13);³⁰ and also more broadly as continuing to occlude truth from the minds of *all* Jews who fail to 'turn to the Lord' (vss 14–15). In the next chapter (2 Cor. 4:3–4), he extends the 'veiling' metaphor to include even non-Jews who refuse to respond to the Gospel. Yet despite this daring shift from positive to negative 'veiling', Paul here – and indeed also in 1 Cor. 11: 1–16 (to which we shall shortly return) – maintains a repetitive interest in the question of 'glory' and of 'image', to which, in 1 Cor. 11, he also adds the connected matter of 'headship' (which we have just seen discussed in the later *Pesikta Rabbati*). Thus even as Paul reverses the meaning of 'veiling' from that of divine presence to that of significant divine absence, he still insistently tackles the issue of where – in the natural and human world – we are to find the true 'image' and 'glory' of God, and indeed, from that, the right forms of 'headship' in the community. The answer for him, of course, is that Christ, not Moses, now provides such a focus, since 'only in Christ is [the veil] set aside' (2 Cor. 3:14); and 'all of us, with unveiled faces, seeing the glory of the Lord as though reflected in a mirror, are being transformed into the same image from one degree of glory to another' (vs. 18).³¹

If Paul's reading of Moses's veil apparently left little room for its later Christian redemption, we shall see shortly that a minority Syriac tradition of Christian exegesis, at least, was able to rescue the motif of the veil in a subtly different way, so that the 'secret' it enshrined was not perceived as something atrophying, let alone being 'annulled', but merely awaiting its fulfilment.³² Still, Paul's influence on later Christianity was of course almost all-consuming; and what he provided by way of biblical exegesis was in one way all the more emphasised in later iconographic elaboration: it was the image of the veiled (feminised) '*synagoga*', often alongside the contrasted, and triumphant, Christian '*ecclesia*', that was to become the standard Christian visual representation of superseded Israel.³³ Yet the much rarer representations of a veiled male Moses almost never, interestingly, concealed his face completely – as if the classic ambivalence about his status remained: part respected prophet, pointing forward to Christ's revelation, part upstaged representative of the old dispensation, as Paul had taught.³⁴

But if the image of a veiled Israel or Moses was most commonly negative in its Christian associations, given Pauline influence, this did not prove the case, interestingly, for Moses's *cloud*. The reverse-supersessionism (or moderated supersessionism) in the case of the cloud might seem wholly remarkable were it not for the mediating influence of Philo, who assuredly lies behind the use of Moses himself, and the cloud in particular, as types and symbols of the 'contemplative' advance *through darkness* which is also cumulated in slightly later Christian exegesis. It is Philo who, reading Moses as the supreme 'prophet', sees him as removed from all passion – including sexual passion³⁵ – and, so prepared, as able to enter 'into the darkness where God was, that is into the unseen, invisible, incorporeal and archetypal essence of existing things'.³⁶ So here the particular darkness of the cloud first becomes explicitly theologically *positive*, in Philo's eclectic marriage of Judaism and middle-Platonism.

However, this ascription of cloudy darkness as positive was not immediately shared in the first Christian writer to fasten, similarly, on the figure of Moses as contemplative 'type'. For Clement of Alexandria, in striking contrast to Philo, the 'darkness' motif of the cloud was something to be *overcome* – manifesting, in fact, the ignorance of the multitude rather than the advance of Moses's theological consciousness.³⁷ Thus it was not until Gregory of Nyssa's *Life of Moses*, in the late fourth century, that the *positive* revelatory significance of Moses's 'dark cloud' was brought over into Christian tradition from Philo, and now with a notable new twist of epistemological precision. Here the Platonic *nous* was seen to meet its limits, and to pass even beyond 'contemplation' to an intimacy with the divine that involved its own dethronement. This matter is worth pausing to explicate, given its interesting, indeed extreme, contrast with the 'modern' scientific epistemological lens with which this chapter will conclude.

For Gregory, Moses's 'ascent' to God starts with the clarification and light of the revelation in the 'burning bush' (identified by him with the 'light' of the incarnation), where noetic clarity is still to be achieved.³⁸ But when Moses begins his ascent of Mt Sinai, he moves through a light cloud to the 'thick darkness' at the height of the mountain. It is here that he realises that, 'This is the true knowledge of what is sought; this is the seeing that consists in not seeing, because that which is sought transcends

all knowledge, being separated on all sides by incomprehensibility as by a kind of darkness.³⁹ Only in his other great commentary, *On the Song of Songs*, does Gregory fill out more completely what it means for the mind thereby to reach its limits; here we see that the use of the 'spiritual senses' (spiritually transformed versions of the 'lower' capacities of taste, feel and touch) have to compensate, in darkness, for the loss of sight and hearing, and simultaneously invoke a form of gender-reformation. Now the soul is not so much the woo-er of 'Wisdom' but more the 'feminine' bride of the Logos.⁴⁰ This point is one to which we shall have reason to return; it represents, one might say, the very antithesis of the 'modern' scientific epistemological attitude to 'Nature's' 'feminine' secrets.

It is not obvious that the same could be said of Gregory's more famous successor in the tradition of 'mystical' darkness, the late fifth-century pseudo-Dionysius the Areopagite. Moses is again the 'hero' here, in Dionysius' 'Mystical Theology'; yet it is not so much that the intellect for Dionysius is superseded by some *other* faculty or capacity. Rather, the mind knows 'beyond the mind' in an *ekstasis* of fleeting 'union': 'Here, renouncing all that the mind may conceive . . . [Moses] belongs completely to him who is beyond everything.'⁴¹ This is a 'dazzling darkness', to be sure, but one completely impenetrable by normal rational thought (even by the 'negations of negations' enjoined on the 'mystical theologian'). God, for Dionysius, is not capable of being brought into some other kind of closeness, except by the *mind's* own capacity for ecstatic self-transcendence.⁴² This position contrasts not only with that of Gregory of Nyssa, but also with the much later (fourteenth-century) Western *Cloud of Unknowing*, which, while appealing to 'Denys' and claiming to teach exactly as he does, actually departs from him dramatically, most notably in the insistence that 'to the intellect, God . . . is for ever unknowable, but *to . . . love he is completely knowable*' (ch. 4).⁴³ Moses is still the contemplative hero, 'who for all his climbing and effort on the mountain was seldom able to see it',⁴⁴ yet now a *choice* between 'intellect' and 'will' has been introduced (under the influence of Thomas Gallus's translation and interpretation of Denys)⁴⁵ such that the 'affective' dimension has become the favoured locus of divine interaction, and the intellect and its activities shrouded altogether in a 'cloud of forgetting' which it is the contemplative's job to place between

himself and 'all creation'.⁴⁶ Here, in 'dark contemplation', is Mary's choosing of the 'best part', one which declares the intellect contemplatively barren, but 'will', 'love' and 'feeling', in contrast, the place of divine grace and presence in the 'cloud of unknowing'.⁴⁷

This last, 'affective', reading of Moses's cloud was not to prove overall the dominating one in Western mystical theology,⁴⁸ but its memorable title indicates the honour which the cloud metaphor had accrued to itself in the Christian contemplative tradition by the later medieval period. Thus, as we have now shown in this second section, 'cloud' was positively embraced by those in the Christian mystical traditions, whereas Moses's veil was treated, at best, with deep ambivalence, at worst with outright scorn. Although medieval art, especially art with mystical or hermetic interests, had a great fascination with veils in general (veils, for instance, that shrouded the inner mystery of the Trinity⁴⁹), the veil of Moses seemingly presented too many ambiguous and competing meaning-sets to allow it to become a central, repetitive or positive theme in the stock armoury of theological metaphors applied to the elite realm of 'mystical theology'.

And the link to 'femininity' was surely a crucial part of that ambiguity, as we shall now explore.

III: The 'femininised' veil: erotic intimacy with the divine, or gendered subordination?

By this time we have seen hints that the topics of Moses, divine darkness, and 'femininity' could not be completely disentangled in the symbolic excess of meanings released by Jewish and Christian exegesis of the Exodus narrative. Whether in the visual representations of Moses as the female superseded/subordinated *synagoga*, bearing her tablets of the Law; or, rather differently, as the 'feminised' contemplative soul/Moses in Gregory of Nyssa's *Life of Moses*; or, by another associative extension, by the linking of the contemplative Mary of the New Testament with Moses's cloud of the Old in *The Cloud of Unknowing*: all these cases indicate something of the paradox we must now confront explicitly. Although, as we have shown, Moses's veil was for the most part a negative feature

in Christian exegesis, and a somewhat embarrassing or elusive mystery in rabbinic thought,⁵⁰ it could nonetheless become, in some minority traditions in both religions, positively interpreted – *precisely qua 'feminine'*. The symbolic 'femininity' that in one context associated Moses with subordination and supersession, could, in another, render his veil a mark of special erotic intimacy with the divine. Just as Moses in Exodus straddles, as both traditions saw, the ambivalence between divine presence and dangerous idolatry, so he also occupies – as a few commentators were to intuit – a place in this other, correlative, ambivalence: the double-meaning of the 'feminine'.⁵¹

Where then, other than in starkly supersessionist Christian iconography, was Moses's veil read as a woman's veil, or Moses otherwise 'feminised'? Two fascinating examples, one Christian, one Jewish, must suffice here as further indicators of this symbolic nexus of association. Taken together, they will then lead us back to Paul on veils with new eyes for gendered cross-connections in his text.⁵²

The great poetic Syrian Orthodox bishop of the early sixth century, Jacob of Serugh, was to interpret Moses's veil in a way fascinatingly different from Paul, even though in so doing he simultaneously appealed with force to the Pauline corpus, both to Paul on Moses's veil, and to (deutero-)Paul on the 'great mystery' of marriage (Eph. 5:22–33). In his unique poetic homily on the veil of Moses, Jacob presents a vision of *true* doctrine as irreducibly enshrined in the poetic, the prophetic, and the 'secret'.⁵³ Only Christ unlocks the secret to his followers, and even then, not in crass propositional form open to the 'world's' understanding.⁵⁴ The 'great Moses' was thus veiled by God *not* as a sign of his inferiority, argues Jacob, but as an indication of the necessarily veiled nature of all prophecy until Christ was to fulfil it.⁵⁵ Moses's veil, according to Jacob, is thus akin to the veiled virginity of the Church as it awaits its bridegroom, Jesus; what 'Moses' (in Gen. 2:24) spoke of in terms of God's blessing on physical marriage, is now fulfilled though the Church receiving its bridegroom in the sacraments of the Church.⁵⁶

Jacob's chaste 'eroticisation' of Moses's veil thus effects a remarkable remodelling of the Pauline notion of the 'glory being set aside' in 2 Cor. 3,⁵⁷ even as Jacob continues to cite 'the great Paul' with full apparent appro-

bation. This *positive* 'feminisation' of Moses finds a certain remarkable Jewish parallel, not so long afterwards, in the rabbinic commentary, *Song of Songs Rabbah*, but with a significant difference of detail. Here, commenting on *Song* 4. 5 ('Thy two breasts'), the author develops an extensive analogy between the female lover's breasts in the *Song* and Moses and Aaron: 'Just as the breasts are the beauty and the ornament of a woman, so Moses and Aaron were the beauty and ornament of Israel. Just as the breasts are the charm of a woman, so Moses and Aaron were the charm of Israel . . .'.⁵⁸ Interestingly, however, the commentator does not make a connection between Moses's *veil* and the 'veil' in the *Song* text just before this (*Song* 4. 1, 3);⁵⁹ and one cannot help wondering whether there may be some deliberate repression of that possibility on account of the well-known Christian polemic against Moses's veil: on this matter we can only speculate, but it does not seem a wild supposition to suspect such an avoidance.

Yet once we see this later connection, in both Jewish and Christian contexts, of a Moses 'feminised' by his 'erotic' intimacy with God, an intriguing possibility thereby presents itself, by back-formation: is it that Paul's contentious discussion of women's veiling in 1 Cor. 11:1–16 may also have had his arguments about *Moses's* veiling hovering in the background? To be sure, it would be a highly implicit 'hovering', since nowhere in this passage in 1 Cor. 11 does Paul explicitly invoke Moses. Yet certain hints are present that strongly suggest a connection to 2 Cor. 3, in addition to the obviously shared theme of 'veiling'. In particular, there is the repeated language of 'image', 'glory', and (as discussed above) 'headship', all of which are thematic points of discussion in relation to Moses and his veil in Jewish exegesis, and signs that Paul has a collocation of pre-connected ideas at work in both contexts. In other words, if the idea of Moses as a veiled figure lies in the background of Paul's exposition in this (admittedly tortured and far from consistent⁶⁰) passage in 1 Cor. 11, then his argument for women's covering their heads at worship might, implicitly, involve the following logic: man is to woman as (uncovered head of) Christian is to (veiled head of) Jew [*qua* Moses]. Where would this line of thought lead us?

Perhaps particularly suggestive for this putative connection is the verse

whose meaning has always effectively defeated the New Testament commentators (1 Cor. 11:10): 'For this reason a woman ought to have authority (*exousia*) on her head, for the sake of [*or*, according to: *dia*] the angels.'⁶¹ This verse has, to say the least, caused rather desperate exegetical attempts at explication from the very start; and already from the time of Tertullian 'the angels' here were interpreted, negatively, as the 'angels' of Genesis 6 who transgressively mated with human women.⁶² In other words, the 'angels' have been seen as what women should *guard themselves against*, prophylactically, in wearing a head-covering, and that to protect their sexual modesty.

However, if we make the proposed link to the Moses story, it is possible that the rich nexus of associations we have already unearthed can help us finally understand this elusive verse, which seemingly forms some sort of climax to Paul's argument in 1 Corinthians 11. Two possibilities in fact present themselves, and in the manner of 'proto-rabbinic' argument (operating characteristically by means of multi-layered and sometime chaotic bombardments of symbolic allusion) the two may not necessarily need to be taken as mutually exclusive.

The first possibility works backwards from a suggestive connection in a much later Jewish source, the *Midrash ha-Gadol*⁶³ on Exodus 34:34. In the *Midrash ha-Gadol*, Moses is compared favourably to the angels on account of being able to approach God *without* covering his face,⁶⁴ whilst (it is said) even the angels must cover their faces with their wings (as in the vision in the temple in Isaiah 6:2). This text may well in fact be a latter-day Jewish riposte to the Pauline supersessionist claim that reserves for Christ alone the prerogative of approaching God 'unveiled'. But if indeed the figure of Moses is symbolically lurking behind 1 Corinthians 11, then Paul (as supersessionist), must, unlike the later Midrashic commentator, here be implicitly aligning the status of Moses with the *covered* 'feminine' head, which *is* veiled like the 'angels' in Isaiah 6, and whose particular 'glory' lies in its subordinate – though in some sense complementary – relation to the uncovered head of the (Christian) man. This would 'feminise' Moses, to be sure, but at the same time accord him, and veiled women with him, a certain particular complementary status of 'glory' before God – a status indeed equivalent to the angels furling their wings over their heads before the throne

of the Lord. Could it not be, then, that this is what Paul has in mind for veiled women: giving to them most significantly, with one hand, a high status and 'authority' normally reserved for the angels,⁶⁵ but taking away, with another, any sense of *straightforward* equality with Christian men? The ambiguity of 'femininity' is fully evident here, but it is now implicitly yoked, most fascinatingly, with the Jewish/Christian ambiguity. As with Paul's notoriously rich and complex understanding of the relationship of Judaism and Christianity in Romans 9–11, so here, in parallel, an equally rich and complex understanding of the relationship of woman to man is implied: mutually necessary to one another, mutually implied by one another, but not straightforwardly 'equal' in power or 'headship'.

One further, and more commonly-known allusion to head-coverings in relation to the Moses story could also be in background play in 1 Corinthians 11 as well, and would certainly support the general train of our argument. In Exodus 33:5–6, Moses is instructed by God to tell the Israelites to strip themselves of their 'ornaments', as a gesture of penitence and fear before the Lord, after their apostasy; and so they do. (This interaction occurs, interestingly, just before Moses requests that he, and he alone, be allowed to see the 'glory' of the Lord directly: Exodus 33: 18.) In the Babylonian Talmud, much is made of this moment of Israel's tragic divestment.⁶⁶ It is read as a removal of double 'crowns' said to have been put upon the (male) Israelites at the moment of their covenantal acceptance of the Law (Exod. 24:7); and just as the Talmud sees 'angels' as responsible for the initial crowning, so it also sees an even larger band of 'destroying angels' as undertaking the subsequent removal.⁶⁷ If we read I Cor. 11:10 in the light of this narrative association (which may well have had some circulation even at the time of Paul), we once again get a revealing clarification: the head-coverings given originally to *male* Israelites by the angels as a sign precisely of their newly redeemed status, their 'authority' and renewed 'headship',⁶⁸ is now in Paul's argument on offer to Christian *women*. To ask them to don head-coverings whilst praying or prophesising, therefore, is in one sense to elevate them to the status of Moses and male Israel, even as they are also required to acknowledge their 'submission' in the christological hierarchy of Christian marriage.⁶⁹ In both these implied renditions of 1 Cor. 11:1–10, then, the woman is enjoined to veil herself

in order to represent the 'authority' of a derivative and yet status-endowed posture of 'glory' before the Lord, in complementarity to that of the male. This posture is akin to the posture of Israel when their heads were 'lifted up' again before the Lord, causing them almost to attain the status of angels, indeed even to occasion the possibility of jealous *resentment* from the angels.⁷⁰

By now we are seeing more clearly, in this account of clouds and veils, how fascinating are the double-messages of 'feminine' gender in their implications for the topic of 'knowing the unknowable' in God. To be 'feminine' before God may, in some circumstances, to be found in a specially favoured, indeed 'erotic' intimacy with the divine, one uniquely suitable for such an 'impossible' form of knowledge; yet even in this position of special intimacy, there may be a new insistence on actual, *female* subordination of some particular sort. Both Jewish and Christian minority traditions, as we have seen, walk this tightrope of gender ambiguity. And it may well be that, in the failure of Paul, and most of his subsequent interpreters, explicitly to link the Mosaic veil discussion of 2 Cor. 3 with the 'feminine' veil discussion of 1 Cor. 11, we are dealing with a certain double repression in both traditions in relation to this nexus of associations. Not only, as we have seen, did Jewish commentators become remarkably coy – probably under the impact of the Pauline critique – about exegeting the precise significance of Moses's donning of an ostensibly 'feminine' adornment; but mainstream Christianity for the most part kept up a firm *exegetical* disjunction between 'feminine' veils in 1 Cor. 11 (about real women in church) and the veiling of Moses in 2 Cor. 3 (about Israel and Christianity). In earliest Christianity, interestingly, only gnostic sources make the connection between the two Pauline passages explicit;⁷¹ and only early 'mystical' sources within Christianity line up the Pauline veiling of women in 1 Cor. 11 with positive 'erotic' intimacy through 'contemplation'.⁷²

It is where Jewish and Christian exegetes converge on the *Song*, then, that the 'erotic' form of veiling connotes *special* access to the (unspeakable) divine. Such an erotic reading of 'veils' was also applied at times, in a public ritual context, to the 'veil' of the Jerusalem temple. As recent studies have illuminated,⁷³ one rather startling set of rabbinic traditions associate the ancient annual pilgrimage to the temple on Mt Zion with an

actual 'seeing' of the Lord (highly dangerous as this was), in the form of an exposition of the ark and a lifting of the temple 'curtain' (or veil) before the Cherubim.⁷⁴ The Babylonian Talmud *Yoma* 54a records how, to begin with, the pilgrims could see only the two 'staves' of the ark sticking out from behind the curtain, 'protrud[ing] as the two breasts of a woman' (and here *Song of Songs* is once more cited).⁷⁵ But then Rabbi Katina is quoted as adding that in fact, 'Whenever Israel came up to the Festival, the curtain *would be removed* for them, and the Cherubim were shown to them, whose bodies were intertwined with one another, and they would be thus addressed: Look! You are beloved before God as the love between man and woman'.⁷⁶ This eroticised and 'feminised' understanding of direct contact with the deity through a 'veil'/'curtain' does not in the Talmud rest on any connection with Moses's veil. Yet when we go to the much later 'Kabbalistic' writings of the *Zohar*, we do – in a completely different context – finally find an allegorical link made between Moses's 'veil' and the more cosmological 'spiritual veils' deemed to divide the divine and material realms, and also to lie between the prophet and God Himself.⁷⁷ With this Kabbalistic link our story of the connection of veils, 'femininity' and Mosaic revelation seems to come full circle, and the ambivalence we have charted all along becomes the more clear; for the 'femininity' that is characteristically adulated in the *Zohar*, and associated with the presence of the *Shekhinah* (or with the secret meaning of *Torah* to be assimilated by the sage), is assuredly not the 'femininity' of ordinary women. Rather, as Elliot Wolfson has put it of late, 'The secret feminine in Kabbalah becomes *part of the male* [sage]' through a process of 'mystical' assimilation.⁷⁸

And that is why a final reference back to Christian 'mystical theology' of a similar period may be a revealing point of conclusion to this complex section. So close was the connection from the early Christian patristic period, given the authority of 1 Cor. 11, between veils and women (in their variously construed forms of subordinate status), that, perhaps unsurprisingly, the connections between *women* and the cloud tradition of dark 'mystical theology' seem in comparison to have been very slight.⁷⁹ For a woman to claim the particular divine intimacy of the cloud, mandated by classic 'mystical theology', was perhaps doubly transgressive: it was,

first, to escape from under the subordinated Pauline ‘veil’ of 1 Cor. 11, and then to enter the noetic ‘dark cloud’ of an elite theological intimacy with God, one of seemingly different lineage from the ‘feminine’ intimacy of veiled submission in the *Song*. Marguerite Porete is a striking example of such double transgression; her extraordinary (and wholly *sui generis*) rereading of the binary of gender in allegorical terms is further evidence of her *outrée* thought styles. Hers was not even straightforwardly the nuptial ‘femininity’ of the *Song*, but rather the dark transgressive nescience of the Philonic and Dionysian heritage. Her fate at the stake (1310) doubtless witnesses to the uniqueness and uncategorisability of her theological stance, her failure to fit within the established symbolic, and gendered, typologies of cloud and veil that we have here outlined.⁸⁰

IV: Nature’s ‘veil’, ‘noumenal’ darkness and the modern scientist

The contrast between the pre-modern traditions of cloud and veil (with all their emphasis on human vulnerability in the face of divine transcendence and mystery), and early modern understandings of the scientific probing of ‘Nature’ under her veil, is a striking one, which is our final task to explore. Whereas Gregory of Nyssa, and some others after him in the ‘dark cloud’ tradition, could stress the final *failure* of mental mastery in the quest for God, and the necessity thereby of utilising a ‘feminine’ posture of veiled receptivity to the divine, the confident attempt by early modern science to *dispel* scientific ignorance concerning the natural world caused an inversion of these epistemological traits and a concomitant transformation in the application of our two key metaphors. Now it was not God who was being directly sought and investigated (as in ‘mystical theology’), but rather the created *vestigia* of His handiwork, to be probed afresh, and scientifically, in the law-governed workings of Nature and the cosmos. Our last section in this chapter will focus primarily on this dramatic epistemological reversal in the period of modernity, but not without a final musing on a certain continuing mystique of the language and imagery of clouds and veils, even in contemporary science. Whilst early modern

science seized afresh on the metaphor of 'feminine' veiling in order to indicate how the newly confident male scientist could lift that veil of Nature's secrets (and simultaneously throw off the heavy mantle of ecclesiastical 'heteronomy'), that was not to say that Nature always disclosed her innermost self without curious modesty or resistance. And even when She did, clouds of *cosmological* mystery were not so easily dispelled, despite strong modernistic ambitions in the direction of that conquest as well. Indeed, as we shall see, a remnant of the Christian 'dark cloud' tradition, with all its elite and trans-noetic associations, arguably still hangs around the language of physics today, especially when its exponents know that they are up against the speculative or even the truly 'unknowable'.⁸¹

A few salient, but piquant, examples must suffice here to support these culminating theses. Early evidence of the new epistemological confidence wielded by modern science, and its revealing connection to gendered imagery, comes perhaps most famously in the pioneering work of the Englishman Francis Bacon (1561–1626). In his writings on science the sexual metaphor is repeatedly used to describe the scientist's necessary subjugation of his mysterious, but somewhat wayward 'wife', 'Nature'.⁸² Yet it is not simply a matter of making her a 'slave' (as Bacon does put it in his early work *The Masculine Birth of Time*),⁸³ but more truly of having, as the feminist philosopher Genevieve Lloyd has expressed it, 'the *right* male attitude to the feminine: chastity, respect and restraint'.⁸⁴ Nature herself has to be approached with 'a certain reverence', says Bacon, but with a determination to find 'truth in natural things', and to ensure (note) a '*hatred of darkness*'⁸⁵ in order to 'renew and enlarge the power and empire of mankind . . . over the universe'.⁸⁶ What today might be called the 'hegemonic' ambitions of the modern European scientific enterprise are here writ large, yet not without a remaining, and interesting, sensibility about the moral dangers of a sheer violation of ('feminine') mystery. A similar transference of the religious metaphor of 'feminine veiling' to the mysteries of Nature continues to appear somewhat later, in the period of the European Enlightenment, in the writings of Jean Le Rond d'Alembert (1717–83), the avid French follower of Newton. Like Bacon, d'Alembert is also aware that even the new scientific mastery comes with certain limits and cautions; and he puts it the more programmatically when he avers,

again utilising the sexual metaphor, that there are mysteries of the natural world which the modern scientist can never hope to explicate completely: they remain inexorably 'behind' the 'veil', he says – a veil, moreover, that 'always hides the workings of its more delicate parts from our view'.⁸⁷ A new apophaticism is here announced for the secular realm of modern science, and one indeed even now still current in the scientific limit-language of 'veiled reality'.⁸⁸

At this point it might be objected that the metaphor of veiling, especially after the great early modern revival of classical study, might more obviously be connected with the Greek story of the unveiling of Artemis than with the more elusive veiling of Moses in the Exodus narrative.⁸⁹ After all, the statue which Apollo had unveiled, according to this Greek story, was said to be precisely a representation of the goddess 'Nature', and to have 'emerged from a fusion between the figure of Artemis of Ephesus and that of Isis, who, according to an ancient inscription reported by Plutarch said, 'No mortal has raised my veil'.⁹⁰ The objection that it must be Artemis in the minds of modern scientists' reflection on 'veiling', rather than Moses, certainly has initial point; but recent studies suggest that, in the fluid manner of so much in the symbolic realm, these two stocks of 'veiling' tradition were grafted onto one another at some point in the early nineteenth century.⁹¹ The Mosaic tradition of revelatory truth and the Heraclitan interest in the hiddenness of Nature converged in the texts of Romanticism and in the concurrent fascination with Egyptology and Isis worship; 'veiling' became a newly fascinating topic, not only for the scientist, but for the classical philologist, the poet and the theologian.

But what, in contrast, of clouds and their parallel modern transformations? As the quotations from Bacon already intimate, we cannot here separate the metaphor of cloudy darkness, or indeed any sort of unclarity, from the exactly inverse ambitions of the 'Enlightenment' for science and philosophy. And yet even here there is a paradox, a *limit* to the lifting of darkness and of the dispelling of obscurity so characteristic of the period, and one which is particularly apparent in the philosophy of Kant, as Keith Ward spells out in this volume. The very fact that an epistemology wrenched from the false dependence on theological authority had to appeal to 'noumenal' darkness as the *condition* of its chastened, non-speculative knowl-

edge is an indication that the cloudy 'mystical' darkness of the Dionysian tradition had not so much been routed but redesigned in new garb. The 'noumenal' now became (depending on one's reading) either an epistemological no man's land, a place precisely where the modern secular know-er could not pass at all; or else (and indeed concomitantly) the wholly mysterious *undergirding* and guarantor of the new secular knowledge.⁹² Either way, the remaining trace of 'mystical' darkness was no longer a matter of revelatory 'dazzling', no longer an unspeakable and direct access to the divine, but instead the recognition precisely of the human *limits* of 'reason alone'.

In this regard a final pair of comparative examples on the recent scientific use of the cloud metaphor may prove instructive and revealing. The first comes from the end of the era of late Victorian confidence in scientific progress; the second emerges several decades later from the period of the creation of the atomic bomb, and from the eventual dissatisfaction with Niels Bohr's original model for the movement of electrons around an atomic nucleus. But the shift in the rhetorical utilisation of the cloud metaphor even in this short passage of time is deeply revealing. Lord Kelvin's talk of 'clouds' in his famous lecture of 1900, 'Nineteenth Century Clouds over the Dynamical Theory of Heat and Light', was in reference to two seemingly imponderable areas (his 'Clouds 1 and 2') of theoretical difficulty in physics which precisely needed to be *dispelled*, in his view, for scientific advance to be furthered.⁹³ Clouds, for Lord Kelvin, represented, in classic modern fashion, the sort of mental nescience that science by definition set out to rout. Yet it is a nice irony that the quantum breakthrough that Lord Kelvin himself already intuitively gestured towards brought an almost immediate reintroduction of the cloud metaphor in a more positive, albeit still-mysterious, mode. Thus, through the writing of Richard Feynman and others, the term 'the electron cloud' has become the standard popularised way to describe the movement of electrons around an atomic nucleus – a matter still shrouded in some remaining mystery, but made even more inscrutable on Bohr's original hypothesis, which had continued to cling to the Newtonian analogy of the passage of a planet around the sun. Clouds, then, like veils, have staged a remarkable re-entry in the discourses of contemporary physics. Whilst nescience is still the

scientist's enemy, mysterious indeterminacy – cloudy and veiled reality – is precisely what science now realises it cannot methodologically avoid.

In conclusion, we have ended this short, but complex, history of two related metaphors just as Moses was seemingly abandoned as an epistemological hero in the modern period, and clouds of mental darkness ostensibly dispersed by secular science and philosophy. Yet the modern male scientist emerged into cognitive light only to find a still-resistant feminine 'veiling' of the Nature that he sought to expose and explicate; and the postmodern scientist went on to find that, given the discovery of the indeterminacy principle and of quantum theory, even 'clouds', also, had a remaining and necessary place in scientific discourse. It is hard to avoid the conclusion that, despite the notable secularism of contemporary science, certain key biblical metaphors for 'knowing the unknowable' continue to exercise the scientific imagination, whether wittingly or no. And one final conclusion, in a story that has involved so many notable symbolic twists and turns, reversals and extensions, is a paradoxical and ironic one. It is as well to remind ourselves that the Nobel Prize medal for Physics and Chemistry is inscribed with *two* 'feminine' allegorical figures – *Scientia* lifting the veil of *Natura*.⁹⁴ What we have here called the 'ambiguity of the feminine' could hardly be more powerfully expressed. In an era when the female capacity for high-level scientific thinking remains a matter of heated public debate and controversy,⁹⁵ it is important to note that veiling, mystery, clouds and darkness are still strongly implicated in the stuff of science, and that these themes, as it has been one of the burdens of this chapter to display, are themselves inextricably connected to deep normative strands of religious thought about the sexes and their interaction. If 'knowing the unknowable' is a resistant paradox of both religious and scientific thought, as this volume is concerned to argue, then it is a theme keenly, and inextricably, entangled with the problems and paradoxes of gender. The Mosaic heritage, and even more significantly its Pauline response, made clouds and veils, whether overtly or covertly, matters of *gendered* response to inscrutable mystery. In seeking to distinguish, and then rebraid four different strands in this complex history of a double metaphoric tradition, it has been our aim to show how complex is the entanglement of these various themes, yet how rich

and suggestive – even now, for contemporary scientific theorizing – is the stock of religious ideas thus combined.

Notes

- 1 An earlier version of some of the themes of this chapter was first presented at the Hartmann Institute in Jerusalem in 1995. I am very grateful to Krister Stendahl, David Hartmann, Joseph Dan, Moshe Halbertal and Alon Goshen-Gottstein for their critical responses and suggestions at that time, which greatly helped my further development of the topic for this volume. John Bowker and Mark Nussberger provided meticulous comments on an earlier draft of this new version, and Jonathan Schofer suggested further rabbinic references. I am particularly indebted to Mark Nussberger for research assistance and for help with reading untranslated texts in Hebrew and Aramaic. Brian Britt, *Rewriting Moses: The Narrative Eclipse of the Text* (London: Continuum, 2004), appeared some while after the first version of my chapter, but ch. 4 covers much of the same ground as the arguments here, and presents a marvellous wealth of evidence on Moses's veil and its reception history. I am most grateful to Brian Britt for generously sharing with me an earlier version of this chapter before its publication in book form.
- 2 Except, as we shall examine later, by gnostic sources (which liked to speculate about cosmological 'veils'); and by one other minority strand of Christian tradition which softened Paul's supersessionism by reading Moses's veil as a *secrecy* motif throughout the entire OT dispensation, awaiting its goal and fulfilment in Christ. For more on this strand in the thought of the sixth-century West Syrian author Jacob of Serugh, see the discussion below, section III. For a possible reading of Paul's text as itself not 'negative' towards Moses, see n. 30, below.
- 3 In this volume Bernard McGinn takes the story on to indicate three *different* variations (not to be understood as mutually exclusive) on the 'negative theology' theme in the West, termed by him 'Negativity 1' ('the unsaying of God and human'), 'Negativity 2' ('the negativity of detachment'), and 'Negativity 3' ('the experience of dereliction'). In different ways all three of these are influenced by the work of ps.-Dionysius, for whom, following Gregory of Nyssa, the figure of Moses is allegorically central.
- 4 Thus Nyssen's rendition of Moses in *The Life of Moses* (esp. Bk II, 27, 178,

- 216) manages to introduce christological themes typologically without a crass concomitant anti-Judaism or triumphant supersessionism (indeed in Bk II, 39 he typologically *identifies* Christianity and ‘the pure Israelite race’: see Abraham J. Malherbe and Everett Ferguson, trans., *Gregory of Nyssa: The Life of Moses* [New York: Paulist Press, 1978], p. 63). The status of christology in the pseudo-Dionysian corpus is rather different, and a disputed matter as to its orthodoxy, since some read it as tending to monophysitism (see, e.g., Dionysius the Areopagite, *The Mystical Theology*, ch. 3, in Colm Luibheid, trans., *Pseudo-Dionysius: The Complete Works* (London: SPCK, 1987), pp. 138–9); but again the christology is not perceived as in any tension with the central theme of ‘divine darkness’ (ibid., chs 1–2).
- 5 These two need not even be incompatible if the ‘subordination’ is read through the figure of the bride in *The Song of Songs*, as we shall shortly discuss. It will be clear as the argument unfolds in this chapter that ‘subordination’ has a necessarily more complex set of associations, paradoxes and possibilities in the realm of ‘mystical theology’ than it does in modern secular feminism: on this point tackled theoretically see, in more detail, my *Powers and Submissions: Philosophy, Spirituality and Gender* (Oxford: Blackwell, 2002), esp. chs 1, 5, 9.
 - 6 Pierre Hadot, *The Veil of Isis: An Essay on the History of the Idea of Nature* (Cambridge, MA: Harvard University Press, 2006) traces the history and influence of the Artemis/Isis story, but does not discuss its connection with the veil of Moses. Britt, *Rewriting Moses*, ch. 4, investigates the convergence of these two stories in the Romantic period: see Section III, below.
 - 7 See, e.g., Exod. 16:6–7, 10; 24:15b–18a; 34:29–35; 40:33–8; Lev. 9:22–4; Num. 9:15–23; 10. 11–12, 33–4.
 - 8 Thus we note that a couple of stories in Genesis that come from the ‘J’ source (see Gen 16:13; 32:30) do have extraordinarily direct encounters claimed between mortals (Hagar and Jacob) and Yahweh; and Exod. 33:11, which probably comes from ‘E’, claims that Moses regularly talked to God ‘face to face’.
 - 9 Since the pioneering source-critical work of Julius Wellhausen (1844–1918), the ‘P’ source in the Pentateuch has been seen as that strand of compilation with special interest in ritual and ceremonial enactment. Thus the whole of Exod. 25–40 is attributed to it (along with all of Leviticus and much of Numbers). The interest in the necessary ‘covering’ of divine ‘glory’ extends from the motifs of ‘cloud’ and ‘veil’ into a ritual concern for the ‘covering’ (*kaporeth*) over the ark of the covenant throughout the latter portion of Exodus.

- 10 See the nuanced treatment of this portion of the narrative in relation to this problem in R. W. L. Moberly, *At the Mountain of God: Story and Theology in Exodus 32–34* (Sheffield: JSOT Press, 1983), pp. 177–80.
- 11 This is the view propounded (to my mind convincingly) by Brevard S. Childs, *The Book of Exodus* (Philadelphia: Westminster Press, 1974), p. 505, after acknowledging the ongoing disagreements amongst scholars about the number of sources and redactors evidenced in ch. 24 (see *ibid.*, pp. 499–502).
- 12 So Ernest W. Nicholson, *God and His People: Covenant and Theology in the Old Testament* (Oxford: Clarendon Press, 1986), ch. 5, esp. pp. 129–30, who in this monograph is mainly concerned to see these verses as the narrative of an ancient and *sui generis* ‘theophany’, rather than as the first testimony to a ‘covenant’ meal. Although these verses are often attributed to ‘J’, we should note that the daring quality of the revelation here in some respects exceeds those ‘J’ passages noted in n. 8, above; for this is a *direct* describable vision, shared by a whole delegation.
- 13 My emphasis. Various attempts have been made to reread ‘ate and drank’: see Nicholson, *God and His People*, pp. 130–2.
- 14 This was indeed the conclusion drawn by some later exegetes on the basis of the Exodus tradition that Moses alone was capable of *unmediated* access to the divine: see Wayne A. Meeks, ‘Moses as God and King’ in Jacob Neusner, ed., *Religions in Antiquity* (Leiden: Brill, 1968), pp. 354–71, for a cluster of unrelated Jewish texts which attribute a heavenly enthronement to Moses, or even call him ‘god’ (Philo).
- 15 This is why the comparisons with other priestly ‘masks’ worn in the Near East is misleading: these would have been put on precisely for ritual duty, the opposite of what the text tells us here. For the problem of the meaning of the Hebrew root *q-r-n* in vss 29, 30, 35 (‘shine’, or ‘horned’, or possibly ‘scarred?’), see Childs, *Exodus*, pp. 109–10, and Moberly, *At the Mountain of God*, pp. 108–9. Childs and most modern interpreters opt for ‘shine’; but Moberly attempts to make the case for a daring supplantation by Moses of the golden calf with his own ‘horns’.
- 16 Moshe Halbertal; the phrase is also used by Britt, *Rewriting Moses*, p. 86. He additionally cites Nahum Sarna, *Exodus* (Philadelphia: Jewish Publication Society of America, 1991), p. 221, who speaks of Moses operating under the veil ‘in his capacity as a private individual’.
- 17 Linda L. Belleville, *Reflections of Glory: Paul’s Polemical Use of the Moses-Doxa Tradition in 2 Corinthians 3. 1–18* (Sheffield: JSOT Press, 1991) ch. 12, provides

- a succinct survey of rabbinic responses to the veil of Moses, and also contrasts the rather different Samaritan readings (ch. 8), which see the veil as *intensifying* the motif of divine glory. She divides the rabbinical readings according to various different motivations for Moses's covering his face; but none very obviously confronts the *meaning* of the 'veil' (*masweh*) itself.
- 18 Nicholson, *God and His People*, pp. 127–30 gives a useful account of the discomfort caused to the rabbis by this claim to direct perception, some of whom draw attention to the later death of Nadab and Abihu (Num. 3:4) as a presumed punishment (see n. 24, below). Maimonides was later to get around the perception problem by suggesting that this was a mental (not visual) perception: *Guide to the Perplexed* I. 4, as discussed in Childs, *Exodus*, p. 506.
 - 19 This quotation from *Targum Onqelos* (approximate date, first or early second CE), and from the two other targumim that follow, are conveniently found in M. Rosenbaum, A. M. Silberman, A. Blashki and L. Joseph, trans., *Pentateuch with Targum Onqelos, Haphtaroth and Prayers for Sabbath and Rashi's Commentary* (London: Shapiro, Valentine & Co., 1946), vol. 1, p. 197.
 - 20 Ibid. Opinions differ on the dating of *Targum Neophyti*. Its compilation dates from somewhere between the late first century to (at the latest) the early fourth century CE.
 - 21 Ibid. *Targum Pseudo-Jonathan* was compiled in the late seventh century CE, but contains much earlier material.
 - 22 Exod. 24:10, LXX: *kai edon ton topon hou eist kei ho theos tou Isra l*.
 - 23 Dionysius the Areopagite, *The Mystical Theology*, ch. 1.3, in Luibheid, *Pseudo-Dionysius*, 137: 'And yet [Moses] does not meet God himself, but contemplates, not him who is invisible, but rather where he dwells'.
 - 24 J. Israelstam and Judah J. Slotki, trans., *Midrash Rabbah: Leviticus* (London: The Soncino Press, 1983), pp. 261–2. This commentary is dated to the fourth to sixth century CE.
 - 25 Judah J. Slotki, trans., *Midrash Rabbah: Numbers* (London: The Soncino Press, 1983), p. 419. *Midrash Rabbah* is a considerably later, twelfth century CE, compilation.
 - 26 William G. Braude, trans., *Pesikta Rabbati: Discourses for Feasts, Fasts, and Special Sabbaths* (New Haven: Yale University Press, 1968), vol. 1, pp. 180–1. (This text is variously dated, from sixth to eighth century CE.) It has to be said that the more ramified and 'convincing' (my word) nature of the explanation given here for the veil is achieved only by twisting the reading of the biblical text so that the Israelites commune with Moses when his veil is *on* (as also in the later *Numbers Rabbah*: see above). In Section III, below, we shall explore the

- potential relevance of this text to an understanding of 1 Cor. 11.
- 27 Note that in this chapter I am using the term 'idolatry' in the wide, generic, sense, of the sinful misplacing of worship of God alone by any other intense focus of interest or reverence. This sense includes the making of actual idols (such the golden calf), but is not restricted to it.
- 28 As we have noted above, Moses could even be called 'god' in Philo (drawing on Exod. 7:1): see again Meeks, 'Moses as God and King' (n. 13). Awareness of this backcloth makes Paul's moves in 2 Cor. 3 the more pointed.
- 29 Britt's insightful reading of this 'ambivalence' (*Rewriting Moses*, ch. 4) is however one I would dispute in some details: he psychoanalyses distractingly, it seems to me, in attributing exegetical 'avoidance of the veil' to 'anxiety before the veil' (ibid., p. 84; see p. 115); or in suggesting that the 'veil has been an unappealing puzzle because it *alienates and silences* Moses' (ibid., p. 87) (my emphases).
- 30 Richard Hays, in *Echoes of Scripture in the Letters of Paul* (New Haven: Yale University Press, 1989), p. 136, has made a fascinating case for reading the Greek of 2 Cor. 3. 13 somewhat differently, rendering *telos* not 'end' but 'goal'/'aim', thus: 'Moses put a veil on his face in order that the sons of Israel might not perceive the true aim (*telos*) of the transitory covenant (*tau katar-goumenou*)'. It is perfectly true, as we shall explore in section III, that one strand in Christian exegesis went on to read Paul in this way (e.g., Theodoret: see ibid., p. 219, n. 49), and – by implication – Jacob of Serugh (see our discussion below). But Hays does not provide any extensive evidence for his claim (ibid., 137) that 'patristic interpreters unanimously' understood *telos* to mean 'goal'; and the negative force of the verb *katargeo* (to annul) cannot really be gainsaid by a rendering such as 'transitory'. Paul is in any case not the only exegete of Exodus 34:34 to suggest that Moses's *doxa* was less than perfectly sustained. Some rabbinic sources also suggest an *inconsistency* in the splendour (see Belleville, *Reflections of Glory*, 67); and the later *Zohar*, interestingly, does speak of a serious deterioration, attributing this to the apostasy of Israel with the golden calf (see ibid., p. 75, and *Zohar* III, 58a).
- 31 Belleville, *Images of Glory*, ch. 23, provides an exacting exegesis of this climactic verse, drawing critically on earlier exegetical attempts and showing that the verse is itself a 'phrase-by-phrase commentary on Exod. 34:35' (ibid., p. 275).
- 32 See the discussion of Jacob of Serugh in the next section; some of the later iconographic representation also interestingly escapes Paul's 'annulment' motif and seems to glorify Moses (as, e.g., in the ninth-century Vivian Bible depiction): see Britt, *Rewriting Moses*, pp. 91–2. Even these two counter-instances show how subtle can be the variants on 'supersessionism', some of them - I

- would argue - *not* falling into the 'anti-Jewish' category. See also the discussion of Gregory of Nyssa, below.
- 33 Wolfgang S. Seiferth, *Synagogue and Church in the Middle Ages: Two Symbols in Art and Literature* (New York: Ungar, 1970) traces the development of this double motif in detail. Also see Britt, *Rewriting Moses*, pp. 98–103. From the twelfth century *Synagoga* is regularly represented with a blindfold, a broken staff, and the tablets of the Law (often broken or slipping away).
- 34 See Britt, *Rewriting Moses*, pp. 91–98, for a description of the (scant) number of Christian iconographic representations of Moses's veil, specifically. Almost never is Moses's head completely covered, interestingly (it is either partially covered, or being unveiled by Christ).
- 35 Philo, *de vita Mosis* II, 68 (alluding to Exod. 19:15), in F. H. Colson, trans., *Philo* (Cambridge, MA: Harvard University Press, 1935), vol. 6.
- 36 Ibid., I, 158. In the same passage Philo makes the claim that Moses was 'named god and king of the whole nation'.
- 37 Clement of Alexandria, *The Miscellanies*, Bk V, 12, in William Wilson, trans., *The Writings of Clement of Alexandria*, vol. 2 (*The Ante-Nicene Christian Library*) (Edinburgh: T & T Clark, 1869), p. 267: 'And when the Scripture says, "Moses entered into thick darkness where God was", this shows to those capable of understanding, that God is invisible and beyond expression by words. And "the darkness" – which, is in truth, the unbelief and ignorance of the multitude – obstructs the gleam of the truth.'
- 38 *The Life of Moses*, Bk I, 20; Bk II, 19–27, in Malherbe and Ferguson, *The Life of Moses*, pp. 34–5, 59–61.
- 39 Bk II, p. 163, in *ibid.*, p. 95.
- 40 Verna Harrison usefully explores this theme in Nyssen's *Commentary on the Song of Songs* in her 'A Gender Reversal in Gregory of Nyssa's *First Homily on the Song of Songs*', *Studia Patristica*, 27 (1993): 34–8. See also Coakley, *Powers and Submissions*, pp. 161–7.
- 41 *Mystical Theology*, pp. 1, 3, Luiheid, *Pseudo-Dionysius*, p. 137. For the *ekstasis* of fleeting union (*benosis*), see *ibid.*, I, 1 (*Pseudo-Dionysius*, p. 135).
- 42 It is the mind (*nous*) that goes beyond itself (*hyper nous*) in union, not some other faculty: see again *ibid.*, I, 1 (*Pseudo-Dionysius*, p. 135).
- 43 Clifton Wolters, trans., *The Cloud of Unknowing* (London: Penguin, 1961), p. 55, my emphasis. In ch. 70 (*ibid.*, p. 137), *The Cloud* author claims that 'anyone who will read Dionysius's [Denys's] works will find that he clearly endorses all I have said . . .'; but this is in fact highly misleading.
- 44 *Ibid.*, p. 140 (ch. 73). Interestingly, although Moses remains the hero of *The*

Cloud author in representing the one who struggles for contemplation in darkness, he is perceived – in contrast to the representation of him in Nyssen or ps.-Dionysius – as ultimately spiritually *inferior* to Aaron: ‘Aaron symbolizes all those . . . who by their spiritual wisdom and assisted by grace may achieve perfect contemplation whenever they like’ (ibid., p. 139 [ch. 71]).

- 45 For a new assessment of the important influence of the Victorine Thomas Gallus on *The Cloud*’s reading of Dionysius, see Boyd Coolman, ‘The Medieval Affective Dionysian Tradition’, in Sarah Coakley and Charles Stang, eds, *Re-Thinking Dionysius the Areopagite* (Oxford: Blackwell, forthcoming).
- 46 Wolters, *The Cloud*, ch. 5, pp. 58–9.
- 47 Ibid., ch. 21, pp. 79–81.
- 48 Bernard McGinn, ‘Love, Knowledge and Mystical Union in Western Christianity: Twelfth to Sixteenth Centuries’, *Church History*, 56 (1987): 7–24, supplies a succinct and illuminating account of how the Dionysian tradition was variously incorporated into late medieval Western thought. See also my *Powers and Submissions*, ch. 4 for a comparison of ‘East’ and ‘West’ on the disjunction of intellect and will at this period.
- 49 See, for instance, the fascinating Jeffrey F. Hamburger, *The Rothschild Canticles: Art and Mysticism in Flanders circa 1300* (New Haven: Yale University Press, 1990) for many examples of such iconographic veils.
- 50 Rashi, late eleventh century, is the first to attempt a close, *semantic* explanation of the mysterious *hapax legomenon*, *masweh*, hoping to probe back behind earlier rabbinic discussions to a clear meaning of the word (since it is not one of the other words used elsewhere in the Hebrew Bible for a veil or covering). He connects the word *masweh* back to two uses of the same root in the Babylonian Talmud (*Kethubot* 60a, 62b), which indicate that the verb-form means to ‘look, or gaze’. He thus takes Moses’s veil to be a ‘cloth that was put in front of the face and of the region of the eyes’ . . . ‘out of reverence for the “rays of glory” – that not everybody should feast on them’ (Rashi *ad* Exodus 34:33, in Rosenbaum, Silberman *et al.*, *Pentateuch*, vol. 1, p. 197). Interestingly, the two examples of the use of the root given from the Talmud both involve women and ‘seeing’, leading some scholars (Joseph Dan, private correspondence) to conclude that Rashi is implying – by association – a connection with women’s veils. This is not however the stated point of Rashi’s analysis, which is purely semantic. It is a further interesting detail that the Western visual depiction of Moses/*Synagoge* starts to represent the ‘veil’ as a blindfold some time after the writing of Rashi’s commentary (see Britt, *Rewriting Moses*, p. 99).

- 51 Here, either eroticized and elevated superiority; or socially subordinated inferiority.
- 52 It must be freely admitted that the making of these connections involve chronological leaps in relation to biblical, patristic and rabbinic materials. However, we do already know that nexuses of thought found in Paul have echoes in much later rabbinic writings, and it is not at all impossible (albeit somewhat speculative on particular points of detail), to see those later writings as enshrining much earlier oral tradition. Hence the deliberate reversal of chronology in this section.
- 53 For Jacob, these three are coterminous. Sebastian Brock supplies a translation and discussion of Jacob's *Homily* 79 on the veil of Moses in 'Jacob of Serugh on the Veil of Moses', *Sobornost* 3 (1981), pp. 70–85. Brock underscores that Jacob is writing in a period of hot contestation of the Chalcedonian heritage, and thus appealing back to an Ephrem-style poetic approach to doctrine as a counter-move against the pressure for greater precision in the reading of the Chalcedonian Definition: '[The Father] wanted to reveal [his Son] to the world in symbolic terms' (*ibid.*, p. 72) . . . 'Thus he cries out in the prophet, "I have a secret" . . . so that the world might be aware that the prophecy contained secrets hidden in symbolic language' (*ibid.*).
- 54 Thus even Christ remains 'veiled' to the 'sight of spectators' (*ibid.*, p. 73) – a seeming contradiction with Paul. Yet compare *ibid.*, p. 75, following Paul on the unveiling in Christ: 'That great beauty that had been veiled has now come out into the open'.
- 55 A striking inversion of Paul is found here: 'The radiance of Moses was in fact Christ shining in him' (p. 73). As with Gregory of Nyssa, Jacob manages to effect a christological supersessionism which *nests within* an assumption of Moses's full prophetic greatness, rather than denying it.
- 56 *Ibid.*, pp. 74–5.
- 57 The 'remodelling' would of course be less dramatic if one were fully persuaded by all the details of Richard Hays's re-reading of 2 Cor. 3: see again n. 30, above.
- 58 Maurice Simon, trans., *Midrash Rabbah Song of Songs* (London: The Soncino Press, 1983), p. 198.
- 59 The Hebrew for 'veil' here in *The Song* (4. 1, 3; 6. 7: from the Hebrew root *ts-m-n*) has no *etymological* connection to the *masweh* of Exod. 34; but – as we have just seen – that does not prevent Jacob of Serugh from making an elision.
- 60 I would be the first to admit that this difficult passage has several, inconsistently related, trains of thought. In particular, one major set of considera-

tions seems to relate to head-coverings, another to hair-styles; and most modern commentators have tried to resolve the meaning of the passage in one of these directions or the other. In addition, the subordinate/dominant relations of 'glory' in vss 6–8 also seem not completely to cohere with the arguments for equality and mutuality in vss 11–12. However once we admit that Paul is combining various (somewhat inconsistently-related) trains of thought together here, in what I earlier called 'proto-rabbinic' style, then the urgent quest for total consistency falls away.

- 61 Because I think that Paul has a covert train of thought here out of his Jewish exegetical inheritance in connection with Moses's veil, I am happy to follow Gerhard Kittel's suggestion, made long ago (*Rabbinica*, ARGU, 1, 3 (Leipzig, Hinrichs, 1920), pp. 17–31), that 'authority' (*exousia*) in this verse involves an Aramaic pun on the root *sh-l-t* ('to exercise power'), which also appears in plural noun form in *p. Shab.* 6, 8b, 48, meaning something like 'head-band' or 'veil'.
- 62 See Gen. 6:1–4. Tertullian's rendition ('On the Apparel of Women', 1.2; 2.10; 'On the Veiling of Virgins', 1. 7), is discussed and supported by Dale B. Martin, *The Corinthian Body* (New Haven: Yale University Press, 1995), pp. 244–9. Joseph A. Fitzmyer ('A Feature of Qumran Angelology and the New Testament', *New Testament Studies* 4 (1957–8), pp. 48–58, suggests a slight variant of this understanding of the angels, drawing on material from Qumran: the angels could be seen as a sort of police force, potentially offended by unveiled women in the place of worship.
- 63 Compiled in the thirteenth century, but almost certainly containing much earlier strands of tradition. The modern Hebrew edition is M. Margulies, ed., *Midrash ha-Gadol on the Pentateuch: Exodus* (Jerusalem: Mosad ha-Rav Kook, 1967). My thanks to Moshe Halbertal for his original suggestion to me that this text might throw retrospective light on 1 Cor. 11/2 Cor 3., when read together. Belleville, *Reflections of Glory*, 69–70, discusses the *Midrash ha-Gadol* exegesis briefly, but not as a proposal to link 2 Cor. 3 with 1 Cor. 11.
- 64 This may in fact be a deliberate Jewish riposte to Paul: it is stressed afresh that Moses is the one who precisely does *not* need to cover his face, even though the angels do: "Whenever Moses went in before the Lord to speak with Him, he would take the veil off" (Exod. 34:34). Come and see the greatness [*gedullab*, viz., distinction, dignity, high office] of Moses which the Holy One (blessed be He!) gave to him – more greatness than the ministering angels. Ministering angels cover their faces opposite the *Shekbinah* whenever they give praise before the Lord – for it is said, "With two [wings] he covered his face"

- (Isa. 6:2). But Moses, our teacher, does not [do] so. He uncovers his face [when] he stands before the *Shekinah*, for it is said, “He would not take the veil off, until he came out” (Exod. 34:34), ed. Margulies, *Midrash ha-Gadol, Ki tissa*, 34:34.
- 65 Recall Ps. 8:5: ‘a little lower than *el him*’ is variously translated ‘a little lower than the angels’, or ‘a little lower than God’.
- 66 See *b. Shabbat* 88a, H. Freedman, trans., *Hebrew-English Edition of the Babylonian Talmud. Shabbath*, vol. 2 (London: The Soncino Press, 1972).
- 67 Ibid.: ‘R. Simai lectured: When the Israelites gave precedence to ‘*we will do*’ over ‘*we will hearken*’ [Exod. 24:7], six hundred thousand ministering angels came and set two crowns upon each man of Israel, one as a reward for . . . ‘*we will do*’, and the other as a reward for ‘*we will hearken*’. But as soon as Israel sinned [through the Golden Calf], one million two hundred thousand destroying angels descended and removed them, as it is said, ‘*And the children of Israel stripped themselves of their ornaments from Mt. Horeb* [Exod. 33:6]. R. Hama son of R. Hanina said: At Horeb they put them on and at Horeb they put them off. . . . R. Johanan observed: And Moses was privileged and received them all, for in proximity thereto it is stated, *And Moses took the tent* [Exod. 33:7]. Resh Lakish said: [Yet] the Holy One, blessed be He, will return them to us in the future, for it is said, *and the ransomed of the Lord shall return, and come with singing unto Zion; and everlasting joy shall be upon their heads* [Isa. 35:10]; the joy from of old shall be upon their heads’. (Rashi *ad Exodus* 33:5, in Rosenbaum, Silberman *et al.*, *Pentateuch*, vol. 1, 187, also takes up this theme.)
- 68 We recall here the same themes as later discussed in the *Pesikta Rabbati*, see n. 26, above.
- 69 I Cor. 11, I Cor. 7 and Eph. 5, if taken together, present a complex picture of ‘mutual submission’ between the sexes which is nonetheless also mandated female subordination of a sort. It is however certainly not a *straightforward* ‘top-down’ hierarchy. The parallels with Rom. 9–11 and Paul’s treatment of the problem of Israel’s relation to Christianity are potentially very revealing, but cannot be further pursued in this context.
- 70 This explains why the reference to angels here can remain double-sided: women both attain an equivalent status to them, and simultaneously potentially jostle with them for a superior status, as did Moses at Sinai. (Yet a further variation of the latter is the possibility that the head covering is to keep the angels from being frightened or *disturbed* by the new status of the women: see Belleville, *Reflections of Glory*, p. 70, for a discussion of this idea *re* Moses’s veil and the

ministering angels in *Mishnath Rab Eliezer*, pp. 150–1). For a detailed account of the theme of angelic rivalry with Moses, see Joseph P. Schultz, ‘Angelic Opposition to the Ascension of Moses and the Revelation of the Law’, *Jewish Quarterly Review* 61 (1971): 282–307.

The final implication of my suggested reading of 1 Cor. 11:10 in the light of the Moses traditions, is to understand it thus: ‘Therefore [*sc.* because of the derivative glory of the woman from the man: vss 8–9] the woman ought to wear *her* authority [pun: headcovering] on her head [*sc.* as Moses did], for the sake of the angels [*sc.* to indicate that in the hierarchy she is at least as high as them, and indeed higher - paralleling the force of the *dia* in vs. 9 – just as Moses was, albeit now superseded by Christ]’.

- 71 Irenaeus cites such a gnostic (Valentinian) source in *Adv. Haer.* 1. 8. 2: ‘The coming of the Savior with his attendants to Achamoth is declared . . . by [Paul] in the same letter, when he says: “A woman ought to have a veil on her head because of the angels” (1 Cor. 11:10). Now, that Achamoth, when the Savior came to her drew a veil over herself through reverential modesty, Moses rendered manifest when he put a veil on his face’. Cited and commented upon in Belleville, *Reflections of Glory*, pp. 57–8.
- 72 Origen makes this connection explicit at one point in Bk III of his *Commentary on the Song of Songs*, when he identifies the bride of the *Song*, the Church, and the veiled one of 1 Cor. 11:10: see R. P. Lawson, ed., *Origen: The Song of Songs: Commentary and Homilies*, ACW 26 (New York: Newman Press, 1956), p. 253.
- 73 See Michael Fishbane, *Biblical Myth and Rabbinic Mythmaking* (Oxford: Oxford University Press, 2003), pp. 173–7; and Gary A. Anderson, ‘Towards a Theology of the Tabernacle and its Furniture’, unpublished MS available at <<http://orion.mssc.huji.ac.il/symposiums/9th/papers/AndersonPaper.pdf>>. I am most grateful to Gary Anderson for discussion of this material.
- 74 See the discussion in Anderson, ‘Towards a Theology of the Tabernacle’, p. 15.
- 75 This time *Song* 1.13: see BT Yoma 54a, cited in Anderson, *ibid.* The same passage is cited and discussed in Fishbane, *Biblical Myth*, pp. 174–5.
- 76 Again, BT Yoma 54A, also cited in Gary Anderson, ‘Mary in the Old Testament’, *Pro Ecclesia*, 16 (2007): 33–55, at 44–5.
- 77 See, in the Hebrew, *Zohar* III, p. 163a; in English translation, Harry Sperling and Maurice Simon, trans., *The Zohar* (2nd edn, London: The Soncino Press, 1984), vol. 5, pp. 235–6. I am very grateful to Joseph Dan to alerting me to this text, which is missed by Belleville, *Reflections of Glory*, pp. 75–6, in her treatment of the theme of Moses’s veil in the *Zohar*.

- 78 Elliot R. Wolfson, ed., 'Occultation of the Feminine and the Body of Secrecy in Medieval Kabbalah', in *Rending the Veil: Concealment and Secrecy in the History of Religion* (New York: Seven Bridges Press, 1999), 143, my emphasis. See also his 'Crossing Gender Boundaries in Kabbalistic Ritual and Myth', in *Circle in the Square: Studies in the Use of Gender in Kabbalistic Symbolism* (Albany: SUNY Press, 1995), ch. 4.
- 79 I am not taking the 'essentialist' line here found in (e.g.) Grace Jantzen, *Power, Gender, and Christian Mysticism* (Cambridge: Cniversity University Press, 1995), *inter alia*, that 'intellectual darkness mysticism' was entirely reserved for educated men, and women therefore consigned to 'affective' and bodily 'mysticism'. (This disjunction ill fits Porete – who may actually have influenced Eckhart – or Julian of Norwich, for instance.) But access for women to scholastic training in Dionysian traditions was indeed highly limited at this time. The later medieval period did see a great outburst of 'nuptial' mystical theologians amongst women; but the sixteenth-century Spanish Carmelites (Teresa of Ávila and John of the Cross) were amongst those who combined the Dionysian and the *Song* traditions. For Teresa in the Counter-Reformation era, however, both an access to Dionysian 'mystical theology' (which could only be through her male confessors), and to the *Song* in the vernacular (which was then banned), was difficult and somewhat transgressive.
- 80 See Ellen L. Babinsky, trans., *Marguerite Porete: The Mirror of Simple Souls* (New York, Paulist Press, 1993), with the useful Introduction (pp. 5–48) by Babinsky to the distinctiveness of Porete's thought and the gender subversions implied in it.
- 81 As other authors discuss in this volume, we must distinguish between a variety of levels and types of 'unknowing' confronted in science: from matters which are (or were) merely *difficult* to explain; through matters which are (or were) *intractable* on the basis of outworn paradigms; to matters which in pragmatic terms simply *could not be known* by humans at any particular time (e.g., how many species of ants there are); to matters which must necessarily remain matters of *speculation* and dispute (e.g., the origins of the cosmos). The history of science also obviously teaches us about moments of discovery when an item in one of these categories has been moved to another, i.e., to a less impenetrable form of 'unknowing'.
- 82 'Let us establish a chaste and lawful marriage between Mind and Nature', as Bacon puts it in his *The Refutation of Philosophies*, in B. Farrington, trans., *The Philosophy of Francis Bacon: An Essay on its Development from 1603-1609 with New Translations of Fundamental Texts* (Liverpool: Liverpool University Press, 1964), p. 131.

- 83 Published posthumously in 1653; now in Farrington, *The Philosophy of Francis Bacon*, see p. 62: the narrator announces, 'I am come in very truth, leading to you Nature with all he children to bind her to your service and make her your slave.'
- 84 Geneviève Lloyd, *The Man of Reason: 'Male' and 'Female' in Western Philosophy* (Minneapolis: University of Minnesota Press, 1984), p. 17, my emphasis. I am indebted to Lloyd's treatment of gender in Bacon in ch. 1, and references supplied there.
- 85 Francis Bacon, Preface to *The History of the Winds* (1662-3), in J. Spedding, R. L. Ellis and D. D. Heath, eds, *Francis Bacon: Works* (London: Longman, 1858), vol. 2, pp. 14-15, my emphasis.
- 86 Francis Bacon, *Novum Organum*, I (1620), aphorism CXXIX, in J. Devey, ed., *The Physical and Metaphysical Works of Lord Bacon* (London: George Bell, 1901), p. 446.
- 87 Jean D'Alembert, *Essai d'une nouvelle théorie de la résistance des fluides* (Paris: David, 1752), p. xxix.
- 88 The metaphor of the veil was used memorably and repeatedly by Sir Arthur Eddington (1882-1944): see the relevant selection from his writing in Ken Wilber, ed., *Quantum Questions* (Boston: Shambhala, 1984), ch. 19 ('Beyond the Veil of Physics'); more recently the French physicist Bernard d'Espagnat has given 'veiled reality' new coinage in his discussions of quantum phenomena: see his *Veiled Reality: An Analysis of Present-Day Quantum Mechanical Concepts* (Reading, MA: Addison-Westly Publications, 1995).
- 89 Hadot, *Veil of Isis* (see n. 6, above), devotes his whole monograph to the modern history of the reception of the Greek story. On the key issue of the inscrutability of 'Nature', he does acknowledge a possible biblical link – already noted by Pascal – to the book of Job (*ibid.*, p. x); but he does not consider the thematic connection to the veil of Moses.
- 90 *Ibid.*, p. ix. This story must also be understood 'in the perspective of Heraclitus's aphorism, "Nature loves to hide"' (*ibid.*, p. viii).
- 91 Britt, *Rewriting Moses*, pp. 111-14, following leads in Jan Assmann, *Moses the Egyptian: The Memory of Egypt in Western Monotheism* (Cambridge, MA: Harvard University Press, 1997), shows how the European interest in Egyptology in the late eighteenth century led to an identification of Isis and Yahweh in at least one influential masonic treatise of the period (Karl Reinhold's *Die Hebräische Mystereien oder die älteste religiöse Freymaurerei* of 1788); and this was followed by Friedrich Schiller's 1790 lectures, *Die Sendung Moses*, which also made Moses's revelation and Egyptian religion equivalent, in quest of a universal religion

and natural law. This identification of Mosaic Law and a law of 'Nature' was in turn taken up by Kant, Goethe, and Beethoven (amongst others); the implicit connection here between two 'veiled' figures – Moses and Isis – is striking, although rarely commented upon.

- 92 Alvin Plantinga, *Warranted Christian Belief* (New York: Oxford University Press, 2000), pp. 9–30, esp. pp. 16–20, comments incisively on this ambiguity in Kant's first Critique. For the relevant section in Kant, see Norman Kemp Smith, trans., *Immanuel Kant's Critique of Pure Reason* (New York: St Martin's Press, 1970), pp. 257–75.
- 93 William Thomson, first Baron Kelvin, 'Nineteenth Century Clouds over the Dynamical Theory of Heat and Light', an address given at the Royal Institution in London, 27 April 1900, and discussed by John W. Bowker in *Licensed Insanities* (London: Darton Longman Todd, 1987), pp. 46–8, and again in this volume. The two 'clouds' here were the two remaining arenas of theoretical *aporia* preventing a complete Newtonian account of the universe.
- 94 *Natura* here is the goddess Isis; according to the official description of the medal (which was designed by Erik Lindberg), 'The veil which covers [Isis's] cold and austere face is held up by the Genius of Science'. The inscription, a quotation from Virgil, *Aeneid* VI, 663, runs: *Inventas vitam juvat excoluisse per artes*.
- 95 Only consider the recent furore (in 2005) caused by former President of Harvard Lawrence Summers's remarks about the (supposed) relative ineptitude of women for scientific careers: see <<http://www.president.harvard.edu/speeches/2005/nber.html>> for the transcript of his original speech; and <<http://www.president.harvard.edu/speeches/2005/womensci.html>> for his retraction and apology to the Harvard Faculty.

Knowing the Unknowable about God and the Universe: Humility, Hope and the End of Knowledge

Oliver Davies

We have been invited to consider ‘absence as invitation’ with respect to two kinds of knowing, the one scientific and the other religious. Instances of the former show the human mind struggling to make sense of reality when there is insufficient data to support a new theory. Researchers, however, continue to wrestle with the problem in the hope that further data may become available which allow new insights and understanding. This kind of knowing, in which the researchers continue to their goal despite the absence of key data, can most immediately be resolved against paradigms of human knowing which suggest that the epistemic force of a theory can outweigh the insufficiency of data to support it.

In the case of religious knowing, ‘absence as invitation’ can be used to express the withdrawal of God from a human subject, not as the ending of a relationship but as a mode of deepening the relationship. The human subject is thereby challenged either to withdraw in the face of ‘failure’ or to remain attentive in the hope that God, or the sense of the presence of God, will return. This appears in the mystical traditions of Christianity, for instance, as a necessary point of purification in the knowledge of God whereby, in the Spanish Carmelite tradition for instance, modes of knowing which are grounded in human cognition give way to modes of knowing which are more penetrated by the divine Other. Not knowing God is a prerequisite for knowing God, therefore, as the human sensorium is more fully determined by the transcendental Other who addresses it.¹ This also

occurs in a dramatic and comparable way in Indian traditions, as Chapters 9 and 10 make clear.

The notion of 'absence as invitation' implies in some degree the principle of agency. This is certainly the case with respect to religion, since knowledge of God in positivist, revelatory religions such as Judaism, Christianity and Islam is seen as foundationally relational.² This relationality is asymmetric, however, to the extent that the divine 'owns' the relation itself. Christianity in particular renders the human dimension in the understanding of God more complex by taking it to be itself dependent upon divine initiative. In that tradition, understanding is a form of relation which is conditioned in some sense by a continuing divine self-communication. This self-communication of God – generally appropriated in Christianity to the Holy Spirit – transforms the self, who necessarily becomes conformed to the divine object of knowing.

Pneumatological accounts of faith and theologies of grace which are normative in Christian tradition are thus not so different from the 'mystical' accounts of 'unknowing' in that both presuppose that human cognition in faith is in some sense bound up with processes which are internal to divinity itself. Whether as faith, grace, Spirit or 'mystical vision', the interplay between human cognition and divine self-communication serves to undermine any regulative sense of human cognitive agency, such that God can become objectified within the 'ordinary' parameters of human knowing. The doctrine of the Incarnation, which affirms the coming into ordinary existence of the divine, retains this principle in its insistence that special 'grace' is required for the penetration of human understanding to pass from the human nature of Jesus Christ, which was accessible to all, to the divine nature, which is accessible only to those whose cognitions have been 'graced' by some version of a divine intervention or self-communication.

With respect to scientific discovery, the principle of agency is more difficult to identify. Science does not work with any account of the *agency* of the world, understood as personal agency, in its own development. Therefore, progress in understanding can be placed purely in terms of dynamics that are internal to human knowing, such as insight, learning, theory and demonstration. Developments in science will reflect any or all

of these. While science and religion (in this case Christianity³) will differ in terms of the role of non-human agency in the construction of knowledge, there may, however, be significant intersections between them with respect to the condition or state of *the one who knows*.

In order to do justice to the topic, it becomes necessary to offer a fuller outline of the differences between scientific and religious knowledge, before proceeding to the question of whether there might not yet be a convergence between them. Such an account will require a paradigm of knowledge itself, for which I am using broadly Kantian principles that an act of knowing entails an interaction between subject and object such that the object constitutes a sensible limit to the cognitive activity of the subject. The subject comes into its own self-possession as knower through encounter with an object which comes to meet the subject as *resistance*. The subject nevertheless needs to understand the object, since it lives in a world of objects (as well as other subjects) and needs to learn how to function effectively within such limits and constraints. The subject needs to learn how to change the resistance offered by objects as far as possible into opportunities and possibilities rather than pure negations and limits to the subject's intentionalities. This is a cognitive model of survival, in its minimalist form, and of flourishing in the world in its maximalist form.

This model is nicely developed in the semantic logic of C. S. Peirce in the notion of secondness (encounter with bare objectivity or reality) and thirdness (the discovery of oneself as participant in reality through the act of comprehending the bare real as disclosed in secondness).⁴ Peirce's logic also envisages 'firstness' as a realm of purely abstract or notional concepts (concepts which configure possibilities and resources as a necessary preliminary for comprehending the bare object). Firstness is linked with abductive, or speculative, types of reasoning. According to Peirce, human knowing results from encounter with an intractable other, which demands to be understood if it is to be successfully used or negotiated. This negotiation establishes human identity and culture as a form of activity which is predicated upon human self-understanding as agent or 'knower', who participates in and thus also shapes the reality encountered.

This Kantian–Peircean model serves well to illustrate the character of scientific knowledge which, however abductive, theoretical and imaginative

it might be, pushes towards (or at least ultimately rests upon) demonstration and verification. Science seeks to maximise the objectivity of human knowing in a way that sets it apart from the arts. It has an investment precisely in *resistance* to the subject as centre of knowing, since it is resistance (e.g. materiality as the play of forces) which typically mediates (perhaps even constitutes) cognitive objectivity. Scientific demonstration as a public process requires agreement as to the nature of the problem tested: the character of this particular resistance which makes knowledge possible. Artistic knowledge, on the other hand, does not work with the same density of resistance. Although interpreters of a poem or a portrait will have a material text or painting in common, it will not present the same intractable resistance as a scientific ‘problem’ and the knowledge it engenders will not have the same ‘public’ or ‘objective’ character.⁵

The model can also be applied in order to illustrate the character of religious knowledge, which includes human knowledge of the divine. Of course, the kinds of conceptuality in play here differ across the religions. Christianity can be taken to represent those religions (such as Judaism and Islam) which presuppose the ‘existence’ of ‘God’, as primary cause of the creation. The use of inverted commas for ‘God’ reminds us that this word is only ever used contextually, which is to say within religious traditions which give the term specific nuances. Where those traditions affirm creation in its strong form (in contrast with Platonic creation, for instance⁶), they will tend towards a particular form of metaphysics as descriptive of the created order, centring on the language of ‘being’, and will converge within a particular problematic concerning the relation between Creator and created.

The presupposition of a strong account of creation, which is to say the affirmation of a comprehensive divine act which brings something from nothing, fosters the language of being as a ‘transcendental’ term, which is to say as a term which runs through all the categories.⁷ This follows from the fact that everything that exists is created, and thus, by virtue of this condition or state, can be said to stand in a relation as created to Creator. To exist therefore is to exist in such a relation. The condition of ‘being created’ is itself a deep continuity that runs through all things – indeed through anything that can be said to exist – and so

there is an opening towards an abstractive conceptuality which gives expression to this communality.

The resulting term *esse* or 'being' serves also to convey the power of the original creative act. If divine creation is the creation of something from 'nothing', then 'being' itself can be said to be in opposition to nothingness (rather than, for instance, the chaos or illusion of Platonic tradition). A 'being' that is in opposition to nothingness is a strong account of 'being', which sees it as positive, dynamic and even *good*. Without underestimating the differences between the religions, medieval Islam, Judaism and Christianity embraced such a strong account of 'being', in contrast, for instance, with the 'veridical' account of 'being' that we find in classical Greek philosophy.⁸

The obligation to think of the world in terms of a creation which is entirely the product of a Creator sets up a fundamental dichotomy or problematic within the Creation religions. The 'existence' of the world/Creation is predicated upon the 'existence' of its Creator. But we cannot easily use the term univocally of both creature and Creator. The very nature of a creation would seem to presuppose that it exists (without inverted commas), yet not in a way that the Creator can be held to 'exist', since existence as predicated of the creation must be created existence and existence as predicated of the Creator must be uncreated existence. We have no way of quantifying the difference between something in its created (finite) and uncreated (infinite) form, no way of knowing even whether such a difference might not itself be 'infinite' and therefore incalculable. Perhaps indeed the term 'uncreated' when used of 'existence' simply appears to mark the limit of the 'created' (thus necessitating the use of inverted commas around this term too!). To push this a little further, we may in fact wonder whether it is sensible to designate the world, or *what is*, as created, in opposition to something uncreated, when it is reasonable to suppose that we – as creatures – could never know the uncreated. Why re-designate something that we can know on account of something that we can never know? Is that not to invert the normal mode of deductive and inductive reasoning: we generally identify what we do not know on the basis of what we do know, and not the other way around.

These kinds of questions begin to display just how strange religious

‘knowledge’ is, strange enough indeed to warrant a new set of inverted commas. But of course belief in the ‘uncreated’ is no mere supposition or speculation. Beliefs of this kind are arrived at through faith, which stands in a complex relation to knowledge, and can certainly not simply be reduced to it. However we define faith, it is not a more certain kind of knowledge (unless we redefine knowledge too), nor is it a more authoritative kind of knowledge, except for those who have faith (which surely undermines our ordinary sense of what authoritative means). We thus arrive at a conundrum, which haunts the theology of those religions which profess a Creator God. There can seemingly be no decisive empirical – and thus properly public – grounds for belief in a Creator God. Perhaps Humean scepticism will have the last word here after all.

Christianity, Judaism and Islam are alike in one respect. All three religions affirm that God the Creator is the primary cause of the existence of the world. This claim, however, is based not upon a natural theology which proceeds from arguments of causality with respect to the given (‘where does the world come from?’), but rather upon the faith conviction that God the Creator has revealed or manifested Godself *within the created order*.

The foundation of belief in the ‘uncreated’ in all three religions follows from the conviction of a revelatory encounter within the world with God who reveals Godself to be Creator and the world to be created. Belief, therefore, in an uncreated Creator is not a purely formal, Kantian limit-concept, since it flows from the character of a certain kind of revelatory event within the world which these communities deem or find to be axial. It further follows from this that the concept of creation entails or supports a certain kind of theology of revelation, whereby the created order, precisely by virtue of its close proximity to the Creator, can itself become the vehicle or site of communication or self-communication of the uncreated Creator.

Amongst these three religions, it is Christianity which offers the most uncompromising account of revelatory divine presence within the created order. To be incarnate is to possess a body, and thus is to be subject to the kinds of constraints (not least mortality) which limit bodies. We can say therefore that in incarnation God enters as deeply as possible into the

world, and thus shares as extensively or as immediately as possible the contingency of the created order. Christian theology expresses this dynamic in terms of the Chalcedonian formula of two natures in one (embodied) personhood. Here the humanity of Christ is his identity as created and the divinity is his identity as uncreated.

But let us return to our epistemological paradigm. Knowing things is about encountering their resistance or capacity to limit. In the case of empirical knowing, which includes scientific knowing, the object known presents a limit which is defined in spacio-temporal terms. Thus an object is encountered within a specific spacio-temporal framework, as occupying a particular point in space and time. The subject who knows is herself configured as knowing subject within a specific time-space nexus by the spacio-temporal particularity of the object known. Contained within that spacetime framework is a chain of causality which grounds explanatory modes of understanding, with respect both to object and subject.

In the case of Christian belief, one object to be known in the world is unlike any other. Jesus Christ is both human and divine, created and uncreated, and so we can say that it is the humanity of Christ which is known through the historical presence and action of the body of Jesus within the spacetime continuum. But faith affirms that this body is also the body of God, which is to say the body of the divine nature, or divinity, of Christ. As well as being a human body, it is the body also of the Word. We have to ask the question, then, how it can be known to us, who are created, since the Word is itself uncreated? How can we who exist as creatures know God whose existence is uncreated?

At this point we need to step back and remind ourselves that the Christian confession of faith is that the uncreated God truly enters the created state through the Incarnation. But God cannot be in space and time, since God is uncreated. What happens therefore if God, the uncreated Creator, enters the created world? Can we know the uncreated divine nature, the divinity of Christ, within time and space? And if so, then how can this knowledge occur?⁹

As we have seen, human knowledge is normally predicated upon an encounter with resistance within space and time. The human embodiment of Christ can give us such resistance. But the uncreated God

cannot be encountered as a resistance within space and time. And so we should ask the question in a different way, and consider whether by entering space and time, the uncreated God does not now become the limit of space and time. Can it be that we can encounter God *in* space and time as the *limit* of space and time? This would still remain a kind of resistance, but it would now be an absolute resistance which can never be accommodated or synthesized within our spacio-temporal cognitive categories.

Let us summarise this position. With respect to the Incarnation, it is only the – created – humanity of Christ that can present resistance in such a way that it can be known by us in space and time. But the incarnational claim is more than this: it is precisely that the uncreated divinity is one (*homoousios*) with the humanity and is thus present within the created order, and in a way that makes the divinity share in the contingency of embodiedness.¹⁰ How are we to know that uncreatedness, which is the uncreatedness of the Word through whom, according to Christian tradition, ‘all things in heaven and on earth were created’?¹¹ As uncreated, the Word (which is to say the divinity of Christ) cannot present resistance within space and time, except through the created humanity of Christ, with which it has chosen to be united in a single ‘personhood’.

But to suggest that the divinity cannot be known in itself by us, and that only the humanity can be known, is to set up a differentiation within the Incarnation that might prove finally to be an intolerable one. Unless the divinity is in some sense knowable, in a way that distinguishes it from the knowable humanity of Christ, we shall be left with the conundrum that the incarnational claim that God has taken on flesh in Jesus Christ and truly entered the created order is not in any way *instantiated*. What would it mean to claim that God has entered the world if the same claim entails that God has done so only in a way that is radically and principally *unknowable*? We should then be left with a religious epistemological structure that is almost entirely at odds with the ordinary way in which we understand knowledge and the real. We should then find it extremely difficult to distinguish between objective claims concerning incarnation and purely subjective convictions: faith would not be faith in what is ‘unseen’ but in what is entirely and for ever unknowable.¹² And, being unknow-

able, there would be little sense in which it could be argued that the world is in any way *changed* by the event of incarnation.

What I am proposing here is that we should think of the knowability of the incarnate divinity of Christ not as a resistance within space and time (which it cannot be) but rather as resistance which is itself the limit of space and time. The uncreated becomes present to us within the creation as the limit of spacetime. But how are we to know such a limit? What might be said to constitute it? Is this not just another way of representing what will always remain sheer unknowability?

Here we must return to reflection on the nature of the relation between Creator and created, or world. Christianity, like Judaism and Islam, does not reason to a Creator God from the world in a way that redefines the world as Creation, but first learns about the world as created from revelation of the Creator within the world. The doctrine of the creation is thus not deduced but learned. In the case of Christianity, the revelation affirms that the Creator has actually entered the creation to the extent of being conjoined with a material body, as we are material bodies. Thus the affirmation is that the Creator has actually entered the material fabric of the created order. The question we have to pose here then is what kind of consequences follow from the Creator's entry into the creation?

In the first place we cannot say that there can be no consequences or only limited consequences. Christian revelation entails the conviction that creation took place through the Word: in some sense the created order is contained within the Word and is held in existence by the Word.¹³ For the uncreated Word to enter the creation therefore is for the one *in* whom all things exist to be now *in* the creation. The underlying logic of this event, according to Christianity, is that the creation is perfected by the intervention of the Creator in this way.

The eschatological realisation of the creation is predicted by Old Testament prophecy and is witnessed to in the New Testament writings. The Johannine tradition asserts that prior to the creation of the world the Word enjoyed a divine glory which was then renounced at the Incarnation. It was only with the resurrection that the glory was returned and Christ was re-established in the full expression of his divinity.¹⁴ Ephesians speaks in terms which suggest that the pre-existent Word now 'fills all things'.¹⁵

The coming of the Spirit after the ascension establishes the Church as part of the new creation, to which St Paul refers at Galatians 6:15 and 2 Corinthians 5:17,¹⁶ and which is an important thematic focus in the Book of Revelation, with its account of the creation of 'a new heaven and a new earth'.¹⁷

The eschatological character of the Incarnation shows that the entry of the uncreated Creator into the Creation does not constitute an object offering resistance to the mind within spacetime (it is by virtue of his humanity that Christ is known as an object within spacetime), but rather effects a change at the level of the spacetime medium itself. The limit that is known is now the limit of spacetime itself. The Incarnation effects the realisation of the eschaton within spacetime as the limit or end of spacetime as the old creation. This is known not as an object within the world but as a change within the nature of the world itself. The resulting state of cognition, or reception, of this change is the condition which the Church is said to exist within, which is to say an interval, or period of waiting, characterised as a time of penance and vigil as well as active discipleship and service of others, especially the poor and the marginalised. The world is now in the power of the divine in a new way, it is 'reconciled with Christ',¹⁸ and thus it and all human existence within it, are changed.

What we can identify here, therefore, is a kind of divine self-communication which changes the nature of the created world, changing its status before the Creator, and which can only be 'known' – in the sense of 'received' – through a changed way of living in the world, which we call discipleship. There is, therefore, a certain kind of unknowability at the heart of this, which differs, however, from the unknowability which we might experience with respect to an historical object within the world.

Unknowability of this latter kind may take the form of bafflement or confusion, which follows from the encroachment into our awareness of something that cannot be assimilated to previous knowledge. Such an object remains incurably resistant. In the case of the former unknowability, which we might call a 'cosmic unknowability', the revelatory occurrence can only be known in its effects, which is to say in the change wrought in the world itself through the advent of the uncreated Creator.

Its effects, however, must in some sense be immediate to us, since our deepest connection with the world is through our body, which is to say through our sensibility. But a change in the very world of which we are a part constitutes so radical a change that even if we 'receive' it and come into knowledge of it through our embodied way of life, it will always exceed our appropriation to the same degree that the world itself exceeds our appropriation.

What, therefore, we encounter here is an unknowability that is utterly inexhaustible since it is rooted in the character of the world itself, as eschatologically fulfilled or realised through divine incarnation, but which, on the other hand, is made present to us with a total immediacy, since it is precisely one which is mediated or given by the world of which we are ourselves, without remainder, a part. Thus this means in a certain sense that we ourselves are utterly possessed by an absolute unknowability which is yet 'known' – because in some degree received – by the very shape of our embodied life in the world: that is, by the shape and character of who we are and who we become.

And so we come to the question of whether there can be any convergence between unknowability or unknowing in a Christian context and the experience of unknowing and unknowability as part of the pursuit of scientific knowledge. The relation between religious and scientific knowing can after all be configured as different modes of receiving and conceiving the real. Scientific knowing attends to the real in its particularity. Its manner of knowing is ordered to the nature of the object, or aspect of the real, which is known. Religious knowledge, on the other hand, is the knowledge of the real in its wholeness. This entails a reception of the self-communication of the uncreated Creator within the world through a refiguring of the ground of knowing, which is the world itself.

Thus we can say that the human mind engages *intentionally* with the self-communication of God through the perfection-consummation of the creation, but comes to it only ever partially, through imagination and intuition as much as the probings of reason. This knowledge is known, in so far as it is known, through a radical transformation of embodied life. On the other hand, the partial character of human intentional knowledge of the real in its particularity, as scientific knowing, results from the complexity

of the world that is known. The multiplicity of the limit objects which offer themselves to scientific understanding overwhelms human subjectivity and its cognitive capacities, potential as well as active.

We can, therefore, identify a convergence here between religious and scientific understanding with respect to the partial character of knowing in each case, and thus with respect to the effort or labour of thought that each requires. The challenge of the absolute limit, encountered only in change at the level of the world, and the challenge of the unbounded multiplicity of limits presented to the reasoning scientific mind by objects in the world, are not wholly distinct with respect to their effects upon the human mind. In each case the mind is brought to its own limit by this differential excess of what can be known. This can produce frustration, despair or indifference, but also humility and the preparedness to seek and receive help. We can speak in both cases therefore of the necessity of patience, endurance and hope. Both are foundationally collaborative or cooperative projects of understanding. Both, therefore, are historically 'thick', rich or tradition-centred kinds of understanding, involving sharing as formation and training (the one primarily liturgical and ethical the other primarily pedagogical).

And so, finally, we come to the question of whether these two ways of 'knowing' and 'unknowing' can be said inevitably to be in competition with each other. From one perspective, certainly not, since scientific knowledge builds from the particular and as it moves towards the universal, in terms of general theories with ever greater explanatory power, it tends to lose its purchase in demonstrable objectivity. The unknowability of religious knowledge (in the way we have defined it here), on the other hand, is principally concerned with revelation which must be cosmic in form if it is to be properly revelation of a truly Creator God. Although Christianity is always advised to proceed cautiously if it wishes to move from general affirmations to particulars (the explanation of which is better left to scientists), discipleship does entail some kind of commitment to particularity in the world.

Perhaps, then, it is with respect to particularity in the world that religion and science can non-competitively meet. It may be that religion offers a commitment of ethical engagement through discipleship in the pursuit

of scientific knowledge of particulars, which may prompt enquiry, for instance, about the uses to which such knowledge may be put. But scientists, for their part, offer the virtues of attentiveness, clarity and openness of mind, achieved through long training, without which objects in the world or nodes of resistance will be overlooked or misunderstood, and not seen, as they call to be seen, in the radiance of their particularity.

Notes

- 1 Denys Turner, *Darkness of God. Negativity in Christian Mysticism* (Cambridge: Cambridge University Press, 1995), pp. 1–8, 226–51.
- 2 Michael Sells, *Mystical Languages of Unsaying* (Chicago and London: Chicago University Press, 1994). See also David Burrell, *Knowing the Unknowable God: Ibn-Sina, Maimonides, Aquinas* (Notre Dame, IN: University of Notre Dame Press, 1987), and David Burrell, *Freedom and Creation in Three Traditions* (Notre Dame, IN: University of Notre Dame Press, 1994).
- 3 I am taking Christianity as the exemplar in this paper. There are in fact important distinctions to be made in the way that different religions, even those who hold to a ‘strong’ account of creation, negotiate the implications of their respective accounts of revelation.
- 4 Peirce’s semiotic system is usefully summarised by Graham Hughes in his *Worship as Meaning* (Cambridge: Cambridge University Press, 2003), pp. 134–216.
- 5 What we see in the work of Hans-Georg Gadamer, for instance, is the extent to which a modern relativism (to use this word loosely) tends to extend the purchase of what are traditionally *aesthetic* categories into the field of general epistemology. On this, see in particular Hans-Georg Gadamer, *Truth and Method* (London: Sheed and Ward, 1979).
- 6 Burrell, *Freedom and Creation*, p. 7.
- 7 For an overview of the place of the ‘transcendentals’ within medieval theology of the creation, see in particular Jan A. Aertsen, *Medieval Philosophy and the Transcendentals* (Leiden: E. J. Brill, 1996), pp. 1–24.
- 8 Charles Kahn, ‘The verb “be” in Ancient Greek’, in J. W. M. Verhaar, ed., *The Verb “be” and its Synonyms* (Amsterdam 1973), and ‘Why Existence does not Emerge as a Distinct Concept in Greek Philosophy’, in Parviz Morewedge,

ed., *Philosophies of Existence Ancient and Medieval* (New York: Fordham University Press 1982), pp. 7–17.

- 9 This is the question which Karl Barth poses acutely at the outset of his *Church Dogmatics* (Karl Barth, *Church Dogmatics: The Doctrine of the Word of God*, I.1 (2nd edn, Edinburgh: T&T Clark, 1975), p. 158: ‘The Word of God is uncreated reality, identical with God himself. Hence it is no universally present and ascertainable, not even potentially.’
- 10 There has been, of course, a great debate about the extent to which divinity can be said truly to have penetrated into human and therefore material contingency. The debate is often framed in terms of the possible suffering of God within the hypostatic union. For a recent study which argues that Chalcedon was intended to confirm the possibility of God’s suffering in Christ, see Paul Gavriliuk, *The Suffering of the Impassible God* (Oxford: Oxford University Press, 2004).
- 11 Col. 1:15–16. See also John 1:1–3, 1 Cor. 8:6 and Heb. 1:2–4.
- 12 Barth is right to insist that even though the Word of God can only ever be known through its effects, it *can* be known through its effects, and especially through the human *confession* of the Word (Barth, *Church Dogmatics*, p. 241). These effects are purely human however, rather than the cosmological effects which are argued for here.
- 13 See n. 12 above.
- 14 E.g. John 17:5: ‘So now, Father, glorify me in your own presence with the glory that I had in your presence before the world existed’ (NRSV).
- 15 Eph. 4:10: ‘He who descended is the same one who ascended far above all the heavens, so that he might fill all things’ (NRSV).
- 16 2 Cor. 5:17: ‘So if anyone is in Christ, there is a new creation: everything old has passed away; see, everything has become new!’ (NRSV).
- 17 Rev. 21:1.
- 18 Cf. 2 Cor. 5:18–19.

The Unknowable Not Unknown: The Poetry of R. S. Thomas

Margaret Bowker

This chapter is concerned with R. S. Thomas (1913–2000) because as a modern poet he devoted a great deal of his poetry to the question of whether God, even if revealed, is unknowable, or if he is not, how (and if) he may be known. Thomas seems to me to provide a particular case study of what we are trying to explore. He wrote in ‘No-one’, an autobiography:

There is nothing more important than the relationship between man and God. Nor anything more difficult than establishing that relationship. Who is it that ever saw God? Who ever heard Him speak? We have to live virtually the whole of our lives in the presence of an invisible and mute God.¹

He believed that it is the privilege of the poet to express something of how the unknowable is to be known. He suggested that the God who is and will remain a mystery is ‘mediated’ by the poet:

The mystic fails to mediate God adequately insofar as he is not a poet. The poet . . . shows his spiritual concern and his spiritual nature through the medium of language, the supreme symbol.²

Elsewhere he described his work as a poet as being ‘to deal with the presentation of imaginative truth’.³ He was not claiming that his insights were unique, only that God, the unknowable, might be glimpsed – but ‘Are we sure we can bend/The Absolute to our meaning?’⁴ The task was not made easier for him by the fact that he recognised that our creative

power could obscure that of God. In Thomas's poem 'The Hand', God says to the human hand, 'Messenger to the mixed things/of your making, tell them I am'.⁵ Yet our freedom to shout at God for his hiddenness was one which Thomas cherished and to which he gave considerable vent:

you have given us to bellow our defiance
at you over the grave's maw, or to let
silence ensue so deliberately
as to be taken for an Amen.⁶

Thomas had a keen ear for music and a sharp eye for painting and for the beauty of the natural world: 'God chooses to reveal himself to people . . . in different ways He has evidently chosen to reveal himself to me through the natural world.'⁷ At the beginning of his ministry as a priest in Wales, he was bewildered why the hill farmer pulling 'reluctant swedes' did not see God as readily around him as he did:

Is there love there, or hope, or any thought
For the frail form broken beneath his tread,
And the sweet pregnancy that yields his bread?⁸

Little by little Thomas came to recognise that there were reasons which allowed him to see God in earth and heaven where his parishioners did not. In another poem the hill farmer protests:

I am the farmer, stripped of love
And thought and grace by the land's hardness;
But what I am saying over the fields'
Desolate acres, rough with dew,
Is, Listen, listen, I am a man like you.⁹

The sheer pain of earning his bread from unpromising soil made, all too often, 'a sweet pregnancy' a failed one. It also made life a tough affair. Thomas, in visiting the dying, was choked by the sight

Of that sick man
I left stranded upon the vast
and lonely shore of his bleak bed.¹⁰

So nature alone could not unlock the secrets of an unknowable God, and, in the middle period of his life, Thomas saw how unknowable God is. He said in 1991, 'Nature isn't my God. I'm not in love with things and scenes for themselves. They are the creation.'¹¹ Increasingly, he realised that the creation was quite as cruel as the hill farmer supposed; he views the sea, which excited him as a child and often brought him peace, as sailors view it:

these keep to the one
Fact of the sea, its pitilessness, its beauty.¹²

And Thomas looked hard at the idea that the God who created it was just as pitiless. In 1972, his collection *H'm* appeared, which, more than any other volume, shows that he grasped with both hands the freedom to 'bellow' at God. He wrote in 'The Island':

And God said, I will build a church here
And cause this people to worship me,
And afflict them with poverty and sickness
In return for centuries of hard work
. . . and I will choose the best
of them to be thrown back into the sea.¹³

He is yet more savage in 'Rough'¹⁴ and 'Petition':

And I standing in the shade
Have seen it a thousand times
Happen; first theft, then murder;
Rape; the rueful acts
Of the blind hand . . .
. . . One thing I have asked

Of the disposer of the issues
 Of life: that truth should defer
 To beauty. It was not granted.¹⁵

And as though the cruelty of creation were not enough to suggest that the creator, if knowable, is unpredictable, so the arrival of technology and the insights of science seemed, in Thomas's view, to trouble the natural order and raise enormous questions about the relationship between science and God. Of the hill farmer he would now write:

Ah, you should see Cynddylan on a tractor.
 Gone the old look that yoked him to the soil;
 . . .
 The sun comes over the tall trees
 Kindling all the hedges, but not for him
 Who runs his engine on a different fuel.
 And all the birds are singing, bills wide in vain,
 As Cynddylan passes proudly up the lane.¹⁶

As he was to say of this period, 'faced with the great developments in technology, the lack of faith in the old traditions, and the omnipresence of the aeroplanes practising above our heads . . . my poetry has grown (some would say deteriorated) to be more abstract.'¹⁷ It was not that he begrudged Cynddylan his tractor or the scientific advances of which he tried to read in the 1970s, it was the realisation that all this endeavour, however brilliant, did not help him (or, he thought, anyone else) to *know* more about God. He expressed this in a poem, 'Raptor', published towards the end of his life:

You have made God small,
 setting him astride
 a pipette or a retort
 studying the bubbles,
 absorbed in an experiment
 that will come to nothing.¹⁸

He went further than that at the close of his life:

... Anonymous presence
grant that, when I come
questioning, it is not with the dictionary
in one hand, the microscope in the other.¹⁹

Or again in 'Gradual':

I need a technique
other than that of physics
for registering the ubiquity
of your presence.²⁰

His technique remained that of poetry, and, as we will see, of prayer. But that does not mean he despised the uses of the sciences. His vocabulary expanded to use words associated with them and he recognised the particular calling given by God to those in such disciplines. In 'Mediations' he wrote:

And to one God says: Come
to me by numbers and
figures: see my beauty
in the angles between
stars.²¹

This new beauty (new at least for Thomas) had the effect on him of recognising that knowing the unknowable, initially and in whatever way attempted, was to respond, as it were, to the invitation and to go into darkness, whereas the instinct of many is to draw back from confusion into the familiar. I suspect in this he is admitting to one of the obstacles to the working together of the arts and the sciences. In the poem 'Groping', he wrote of the difficulties of moving away 'to the boundaries':

For some
it is all darkness; for me, too,

it is dark. But there are hands
 there I can take, voices to hear
 solider than the echoes
 without. And sometimes a strange light . . .
 casting no shadow, that is
 the halo upon the bones
 of the pioneers who died for truth.²²

The 'darkness', as he here calls it, became a major theme in Thomas's poetry. What did the seeming 'absence' of God, actually mean? In 'Correspondence' he explains his own failure to give an immediate reply to a letter and adds:

I wish there were as simple
 an explanation for the silence of God.²³

The silence, the darkness and the seeming absence of God, however, served a purpose which he explored in both a lecture and poem entitled 'Abercuawg'

An absence is how we become surer
 Of what we want.

'Mention is made of presence and absence. But we shall never become conscious of the absent as such; only conscious that what we seek is not present.'²⁴ Moreover, we may seek for a presence in either the wrong place or in one which cannot hold its full grandeur. He writes in 'The White Tiger':

God breathes within the confines
 of our definition of him, agonising
 over immensities that will not return.²⁵

But if the majesty of God cannot be contained by our inadequacies of concept and language, this should never stop us from searching for him. In 'Somewhere'

the point of travelling is not
to arrive, but to return home
laden with pollen you shall work up
into honey the mind feeds on
. . . Surely there exists somewhere,
as the justification for our looking for it,
the one light that can cast such shadows?²⁶

Immediate absence, or the darkness which Thomas associates with it, brings, in his view, an intimation of presence, of which, as we have seen, it was not the opposite. So in his poem 'The Absence' he intimates that presence is suggested by absence:

It is this great absence
that is like a presence, that compels
me to address it without hope
of a reply . . .
What resource have I
other than the emptiness without him of my whole
being, a vacuum he may not abhor?²⁷

So absence begs and even entices presence; it is vividly captured in 'Shadows':

I close my eyes.
The darkness implies your presence,
the shadow of your steep mind
on my world. I shiver in it.
It is not your light that
can blind us; it is the splendour
of your darkness.
And so I listen
instead and hear the language
of silence, the sentence
without an end. Is it I, then,
who am being addressed? A God's words

are for their own sake: we hear
 at our peril. Many of us have gone
 mad in the mastering
 of your medium.²⁸

But master it Thomas did. He suggests that this was in silent prayer, the only way to know the unknowable. His poem 'The Flower' expresses it lucidly and explicitly (this is a subject always just beneath the surface of Thomas's work and rarely so directly tackled):

I asked for riches.
 You gave me the earth, the sea,
 the immensity
 of the broad sky. I looked at them
 and learned I must withdraw
 to possess them. I gave my eyes
 and my ears, and dwelt
 in a soundless darkness
 in the shadow
 of your regard.
 the soul
 grew in me, filling me
 with its fragrance.²⁹

He hints at the same possibility in 'Evening', in his last published volume, *No Truce with the Furies* (1995):

The archer with time
 as his arrow – has he broken
 his strings that the rainbow
 is so quiet over the village?
 Let us stand, then, in the interval
 of our wounding, till the silence
 turn golden and love is
 a moment eternally overflowing.³⁰

Thomas is not one to think that prayer of this kind is at all easy, indeed his very reticence about it suggests its difficulty, but one which his prose and poetry also suggest he never shirked. In his autobiography, having remarked on the 'mute God', he goes on to say

But that was never a bar to anyone seeking to come into contact with Him. That is what prayer is. In the Llyn Peninsula we are reminded daily of the old saints and hermits who sought a vision of God amidst the beauty and quiet of the peninsula. But one must be careful. It is easier to pray in such circumstances. It is easier to be good while on your knees than in the middle of all the temptations and hubbub of the world of society. It is a poor religion that believes that it is only in the places set at a remove that God is to be found.³¹

Part of the problem for Thomas in prayer was that, like Adam depicted in the Sistine chapel, he was asked to:

put my hand
out into unknown space,
hoping for the reciprocating touch.³²

That he did so with all the doubt created by the unknowable face of God, is apparent in 'Waiting':

Face to face? Ah, no
God; such language falsifies
the relation. Nor side by side,
nor near you, nor anywhere
in time and space.
. . . letting
your name go and waiting,
somewhere between faith and doubt,
for the echoes of its arrival.³³

And yet wait he did, and its difficulty and reward are captured rarely but articulately in 'Perhaps', which I quote in full:

His intellect was the clear mirror
 he looked in and saw the machinery of God
 assemble itself? It was one that reflected
 the emptiness that was where God
 should have been. The mind's tools had
 no power convincingly to put him
 together. Looking in that mirror was a journey
 through hill mist where, the higher
 one ascends, the poorer the visibility
 becomes. It could have led to despair
 but for the consciousness of a presence
 behind him, whose breath clouding
 that looking-glass proved that it was alive.
 To learn to distrust the distrust
 of feeling – this then was the next step
 for the seeker? To suffer himself to be persuaded
 of intentions in being other than the crossing
 of a receding boundary which did not exist?
 To yield to an unfelt pressure that, irresistible
 in itself, had the character of everything
 but coercion? To believe, looking up
 into invisible eyes shielded against love's
 glare, in the ubiquity of a vast concern?³⁴

It would, however, be a mistake to infer that Thomas found God *totally* invisible and that he was an 'atheist manqué'.³⁵ His long vigils in cold churches with no congregation except the bats³⁶ suggest his fidelity to his Christian priesthood and the witness of prayer. That prayer could be illuminated, as he suggests in his poem 'Bright Field':

I have seen the sun break through
 to illuminate a small field

for a while, and gone my way
and forgotten it. But that was the pearl
of great price, the one field that had
the treasure in it. I realise now
that I must give all that I have
to possess it. Life is not hurrying
on to a receding future, nor hankering after
an imagined past. It is the turning
aside like Moses to the miracle
of the lit bush, to a brightness
that seemed as transitory as your youth
once, but is the eternity that awaits you.³⁷

Or in 'Suddenly':

I looked
at him, not with the eye
only, but with the whole
of my being, overflowing with
him as a chalice would
with the sea . . .
You could put your hand
in him without consciousness
of his wounds. The gamblers
at the foot of the unnoticed
cross went on with
their dicing; yet the invisible
garment for which they played
was no longer at stake, but worn
by him in this risen existence.³⁸

Christ is known for Thomas in his Resurrection where his glory is too bright for our eyes, just as God is too great for our minds. Yet the very silence of God is the most profound invitation we will ever receive to search for him and come to know him. Thomas gave his understanding,

his poetry and his ministry to the quest, and this is the nearest he came to a conclusion:

But the silence in the mind
 is when we live best, within
 listening distance of the silence
 we call God. This is the deep
 calling to the deep of the psalm-
 writer, the bottomless ocean
 we launch the armada of
 our thought on, never arriving.
 It is a presence, then,
 whose margins are our margins;
 that calls us out over our
 own fathoms. What to do
 but draw a little nearer to
 such ubiquity by remaining still?³⁹

Notes

- 1 R. S. Thomas, *Autobiographies*, tr. and introd. J. Walford Davies (London: Dent, 1997), p. 104; cf. Byron Rogers, *The Man Who Went Into the West* (London: Aurum Press, 2006).
- 2 R. S. Thomas, ed., *The Penguin Book of Religious Verse* (London: Penguin, 1963), p. 9.
- 3 W. V. Davies, 'R. S. Thomas: Poet-Priest of the Apocalyptic Mode', in D. Handelman and D. Shulman (Fayetteville: University of Arkansas Press, 1993), p. 111.
- 4 'R.I.P', in *[Collected] L[ater] P[oems] 1988-2000* (Tarsset: Bloodaxe, 2004), p. 160.
- 5 'The Hand', in *C[ollected] P[oems] 1945-1990* (London: J. M. Dent, 1993), p. 264.
- 6 *L. P.*, p. 119.
- 7 Christopher Morgan, *R.S. Thomas, Identity, Environment and Deity* (Manchester: Manchester University Press) 2003, p. 53.

- 8 *C.P.*, 'A Labourer', p. 2.
- 9 *Ibid.*, p. 31.
- 10 *Ibid.*, 'Evans', p. 74.
- 11 Morgan, *Identity*, p. 55.
- 12 *C.P.*, 'The Islandmen', p. 244.
- 13 *Ibid.*, p. 223.
- 14 *Ibid.*, p. 286.
- 15 *Ibid.*, p. 209.
- 16 *Ibid.*, 'Cynddylan on a Tractor', p. 30.
- 17 Thomas, *Autobiographies*, p. 151.
- 18 *L.P.*, p. 256.
- 19 *Ibid.*, p. 69.
- 20 *C.P.*, p. 411.
- 21 *Ibid.*, p. 275.
- 22 *Ibid.*, p. 328.
- 23 *Ibid.*, p. 378.
- 24 *Ibid.*, p. 340; Thomas, *Autobiographies*, p. xvi.
- 25 *C.P.*, p. 358.
- 26 *Ibid.*, p. 293.
- 27 *Ibid.*, p. 361.
- 28 *Ibid.*, p. 343.
- 29 *Ibid.*, p. 280.
- 30 *L.P.*, p. 223.
- 31 Thomas, *Autobiographies*, pp. 104–5.
- 32 D. and J. Abse, eds, *Voices in the Gallery* (London: Tate Gallery, 1986), p. 40.
- 33 *C.P.*, p. 347.
- 34 *Ibid.*, p. 353.
- 35 J. Barnie, 'Was R.S. Thomas an Atheist Manqué?', in *Echoes to the Amen, Essays After R.S. Thomas*, ed. D. Walford Davies (Cardiff: University of Wales Press, 2003), pp. 60–75. Barnie explores both this suggestion and whether Thomas was close in his religious outlook to the Swedish poet Harry Martinson, p. 73.
- 36 *C.P.*, p. 67.
- 37 *Ibid.*, p. 302.
- 38 *Ibid.*, p. 283.
- 39 *L.P.*, p. 118; see also Barry Morgan, *Strangely Orthodox* (Llandysul: Gomer Press, 2006).

Knowing the Unknowable in Indian Traditions: Representation, Absence and Cosmology

Gavin Flood

The unknowability and absence of God is a pervasive theme in the Indian traditions throughout the centuries. That God is unknowable in any complete sense is already present in some of the earliest texts; in the Upanishads,¹ regarded as revelation (*śruti*), we find the negation of all claims to knowledge (*neti neti* ‘not this, not this’, or more literally ‘no!’ ‘no!’) that becomes a standard theme in Indian metaphysics.

It is equally clear that the unknowability of God implies a necessary absence of God, but that this absence is actually a mode of his inviting presence. This sense of unknowability and absence is an important anchor point for the later tradition where the theme of God’s absence as a withdrawal of presence, and so of the invitation, is explicitly developed in the medieval traditions focused on Krishna, Shiva and the Goddess. Those in search of spiritual progress may take the unknowability of God for granted while wrestling all the time with the issues of absence.

In this chapter, I wish first to present the problem of God’s absence and presence in fairly general terms within the Indian traditions. Secondly I wish to show that absence as God’s deliberate withdrawal occurs as a theme in a most sophisticated way in the early medieval tantric traditions centred on Shiva and the Goddess. Finally, I shall relate my discussion to contemporary problems concerning the possibility of comparative theology in a way that does not privilege one totalising claim over another and allows for the particularity of each participant voice.

General considerations

The amalgam of traditions that we have come to know as 'Hinduism' are most often associated with the worship of images in popular representation and this is, indeed, an important and pervasive practice evident to any visitor to India from Fa-Xian (Fa-hsien) in the fifth century to the contemporary tourist.²

The practice of making an offering to a deity as image and receiving a blessing, perhaps simply gazing upon the icon understood as receiving the vision (*darśana*) of the deity, is a basic structure of worship that cuts across different traditions. But, as John Bowker observes in his Introduction, the image is not the totality of the deity and points beyond itself to that which lies behind or beyond the image. This is fundamental in understanding the conjunction of unknowability and absence, and on this, therefore, it may be helpful to make four very general observations.

1. The image as the body (*vigraha*) of God is often regarded as a fragment of the power (*śakti*) or consciousness (*caitanya*) of God, or as an incarnation (*avatāra*) or reflected image (*bimba*) of the deity. The image, or perhaps more accurately, 'icon', mediates the divine presence. Such a presence is also mediated through people in different ways (through priests in a liturgical context, through masters of tradition, through popular possession). Yet we are immediately faced with one of the central problems of the Indian tradition, that the icon is simultaneously the embodiment of the deity and a sign of the deity, both real presence and the 'mimetic' presence of something absent, or, to use Ricoeur's phrase, 'the present representation of an absent thing'.³ We find a spectrum of attitudes here from popular devotion, where the icon is very much treated as the present deity, to theological reflection that the forms of God embody the qualities of God but are not themselves the essence of God, which is without qualities (*nirguna*), ineffable (*avācya*) and inconceivable (*acintya*). The history of Indian religions is characterised by traditions that wished to emphasise non-manifestation as either non-dual (*advaita*) or transcendent (*viśvotirna*), as a higher truth than iconic representation, in contrast to traditions that emphasised the material, iconic and sentient forms of God. Responses to this dilemma have led to the theology of Rāmānuja, who distinguished between God in his essence (*svarūpa*) and

powers (*vibhūti*). The essence of God is unknowable, while the powers of God, such as parental love (*vatsalya*) and majesty (*aiśvarya*) can be known by devotees. It led to the complex proliferation of hierarchies of knowledge and worlds in which God is represented as the topmost level in the chain of being, but this is then undermined, sometimes within the same tradition, by the claim that the top of the cosmic hierarchy is not really God, who is beyond that. If God is all-pervasive and equally accessible from all points of the cosmos, in what sense is s/he at the summit of a hierarchy of being? It has also led to the modernist rejection of image worship by nineteenth-century reformers such as the Deist influenced Ram Mohan Roy and Dayananda Sarasvathi.

2. Reflection on God's presence and absence has led both to sophisticated corrective readings of tradition and to more visceral responses for or against image worship. The specific, related problem of God's intentional withdrawal of presence, and the concomitant idea of searching for that which is absent, is explored within the traditions. Indeed, this is a profound theme that points to the fundamental questions raised by the traditions concerning identity, theodicy and soteriology. On the one hand, in non-dualistic traditions such as Kashmir Shaivism, there is nowhere God is not, if God is understood as the power of consciousness; God as consciousness is indeed accessible from all points of the universe could we but see it. Yet God is also far distant, withdrawn from the world, present only in the devotee's longing and tears for the God 'who lives, alas, away'. This question about the presence of the absent God is a question about representation – not simply about how that which is absent can be made present, but about divine intention, revelation and grace.

3. The representation of God in the Hindu context is the revelation of God. We need to tread carefully here. On the one hand, the enlivening of an icon for the purposes of worship through its awakening is a ritual procedure and is 'automatic' (although the rhetoric is one of grace), while on the other hand, the disciple longs for God who has withdrawn. This withdrawal or absence is itself a representation of God's presence for his devotees, as much as, if not more than, the iconic presence of God seen in worship. The longing (*viraha*) for God who is absent points to his presence and might be seen itself as a representation of God.

4. Theologies of absence develop two lines of approach. (i) God has withdrawn in order to draw out or pull devotees towards him, towards greater love, power, knowledge and freedom from suffering. (ii) God, being a totality, is never really absent. It is only ignorant perception that cannot discern his presence, the recognition of which is the resolution of all perplexing difficulties. These two lines of approach are not mutually exclusive and many Indian traditions hold both together at the same time, as we can see from taking examples from the traditions focused on Shiva.

Theologies of absence – Shaivism

Shaiva traditions (whose focus is Shiva) that developed largely in Kashmir during the early medieval period (eighth to eleventh centuries) were based on an alternative revelation to the orthodox Vedas, a body of texts called Tantras. I choose examples from this period because the Indian traditions had developed a high degree of sophistication and flourished in a civilisation that nurtured them. Due to the impact of Islamic rulers and then colonialism, these traditions became eroded and have not since undergone such a creative expansion.

The root tradition called Shaiva Siddhānta, still active in South India where it became suffused with Tamil devotionism, is pluralist in maintaining three eternal, ontological realities – God, self and world. A monistic tradition developed from this (sometimes called ‘Kashmir Shaivism’, although the tradition extended beyond Kashmir), which maintained the ultimate identity of these three realities.⁴ For the former, the soteriological goal of life is to gain freedom from the cycle of rebirth and for the soul to realise its likeness to, but not identity with, Shiva (*śivatulya*). For the latter the goal of life is the recognition (*pratyabhijñā*) that the self is identical with Shiva (*sāmarasya*). In both traditions there is strong theme of God’s withdrawal as invitation, which is expressed most importantly in cosmological terms. This can be seen in three ways in which this idea is articulated in the monistic, Kashmir tradition, first in God’s five actions, secondly in God’s hiddenness or secrecy, and thirdly in the body as a sign of God’s presence.

1. The five acts of God

The Lord performs the five actions (*pañcakṛtya*) of creation, the maintenance of the universe, the destruction of the universe, concealing himself within it (*tirodbhāna*) and revealing himself to devotees as an act of grace (*anugraha*). It is the third action of God, concealing himself, that is of interest here. The universe is a manifestation of God's pure, unified consciousness (*caitanya*, *samvit*, *cit*), and the degree to which God is manifested as the cosmos is related to the degree to which the pure consciousness of God is concealed. There is a constant movement or vibration (*spanda*) of emanation and contraction within God which is a process of revealing and concealing. God contracting into particularity and manifestation (the universe) is a contraction (*samkoca*) of absolute consciousness. The appearance (*ābhāsa*) of the universe is the contraction of God. Persons (and indeed, all beings) are contractions of supreme consciousness, fragments (*aṁśa*) of that power, the self-limitation of God. An important theologian of the tradition, Abhinavagupta (c. 975–1050 CE) wrote that the divine consciousness remains without differentiation even in its concealment in the midst of differentiation.⁵ His pupil Ksemarāja writes in his *Heart of Recognition* (*Pratyabhijñāhṛdaya*), a text focused on the five acts, that the power of consciousness from its uncontracted state (*cetanapada*) becomes contracted and particularised through its 'descent'. This contraction is an act of concealing the essential nature (*svarūpa*) of God. Ksemarāja therefore wrote: 'To be a wanderer through the universe, through the cycles of being born and dying, is to be in this condition because God is concealed.'

But even in this wandering state, the five actions are still being performed and the limited subject reflects or recapitulates the divine five acts of Shiva. In verse 10 of his *Heart of Recognition*, Ksemarāja writes, 'Even like that [limited experient, Shiva] performs the five acts.' In his commentary Ksemarāja differentiated his own non-dualism from that of Advaita Vedānta on the grounds that in his system pure consciousness is not passive, but Shiva, who is consciousness, always retains his agency expressed in the five acts. Shiva has will (*svacchanda*) expressed through the five actions, a will that is reflected in the individual's will who likewise performs these acts. Through limiting his conscious power, the Lord becomes a wanderer in his own manifesta-

tion. He loses himself within himself in order to find himself. Once a person knows or existentially realises the truth of the five acts within himself he becomes liberated while alive (*jīvanmukta*).⁶ Indeed, while Ksemarāja sometimes used the language of purity and impurity, speaking of the human condition as pure consciousness being covered by impurity (*mala*), he nevertheless emphasised that the five acts occur within individual consciousness itself. As the Lord performs the acts of creation, maintaining the universe, destroying it, concealing and revealing himself, so the individual person creates, maintains, and destroys his own reality and, unconsciously, conceals his true nature from himself. Becoming aware of this process in oneself is a self-revelation spoken of in the theistic language of grace.

In the next verse Ksemarāja moves more deeply into this doctrine and presents an esoteric understanding (*rahasyariūpa*) through re-describing the five acts purely in terms of the processes of consciousness. He wrote: “These [five functions mentioned in the previous verse] are illuminating or manifesting (*ābhāsana*), relishing or being attached (*rakti*), reflexive awareness (*vimarśana*), laying down seeds (*bijāvasthāpana*), and dissolving [them] (*vilāpana*).”⁷ This re-description is derived from an esoteric system which is focused on the Goddess Kālī, but which interprets the Goddess only in terms of consciousness and meditative experience. This system, known most commonly as the Krama or Mahārtha, provided a framework for Ksemarāja within which to reinterpret the cosmology of the Shaiva traditions he inherited.

Thus the process of consciousness flowing out and contracting back into itself is personified in terms of a flow of Goddessess (forms of Kālī) who become manifest in the body. The Goddesses know the universe to be an expansion of their own true nature, but those beings who do not understand this and who perceive a differentiated field of objects are bound to ignorance and rebirth. To experience a liberating cognition, the practitioner needs to become aware of this process of consciousness manifesting and contracting back into itself at every moment. Thus what is created is the flowing out of the Goddesses of sight and the other senses and the manifestation of objects of sense apparently distinguished from the self. This very flowing out of the Goddesses of the senses and their objects is simultaneously the concealing of pure consciousness and keeping beings away from a liberating realisation.

It is, however, possible to become aware of this process and aware of the concealedness of absolute truth – or, in different terminology, of the hiddenness of God. One can become aware for a short time, says Ksemarāja in his auto-commentary, of the supreme condition even when it is manifested through the Goddesses as an object. This awareness is the ‘relishing’ or ‘stabilisation’ (*rakti*) of manifestation. Then, if one can retain awareness of the process of consciousness withdrawing from its objects back into subjective or reflexive awareness (*vimarśa*), then one can experience a fleeting, but very great, delight or aesthetic rapture (*camatkāra*). This rapture is a flavour (*rasa*) akin to the intense aesthetic experience of tranquillity (*śāntarasa*) which can occur in theatrical performance; it is fleeting but intense.

With the withdrawal of consciousness from its objects we have the ‘laying down of the seed’ of future thoughts and actions. Finally, the dissolution of the seed of future, limited mental states, is the awakening and liberating power found in the teachings of a true master (*sat guru*). Thus the dissolution or closing in of the distinction between subject and object of consciousness is the opening out of the truth of pure consciousness by the grace of the master. Consciousness contracted identifies with subjects and objects, but once liberated, contraction ceases and consciousness expands (which is its true nature).

Ksemarāja sometimes uses a cosmological language along with the language of consciousness. The manifestation of the universe of appearances is the contraction of pure consciousness while the expansion of pure consciousness is the contraction of the universe of appearances. Ksemarāja wrote: ‘For in that torrent of manifestation (*prasanti*), the universe opens out and continues and in the turning back of that current, it closes in.’⁸

Conversely, the ‘closing in’ (*nimesa*) of appearance is the ‘opening out’ (*unmesa*) of God as pure consciousness. In theistic terminology which is sometimes used by the Kashmiri non-dualists, the opening out or appearance of the cosmos is the closing in, contraction, or concealing of God, while conversely, the contraction of the cosmos is the opening out or revelation of God. The degree to which there is the appearance of difference, the contraction of consciousness, God is concealed, while the degree to which there is non-difference, God is revealed. All this happens within consciousness and is entirely due to the will (*svacchanda*, *icchā*) of the Lord. This cosmological process

shows that the hiddenness of God is necessary for manifestation and differentiation. Indeed, not only is the withdrawal of God a necessary condition for appearance, it is a necessary condition for liberation (otherwise there would be nothing to be liberated from). Of course, there is the problem here in that, were God not to have manifested the cosmos at all, there would be no need for liberation through grace – but Ksemarāja did not tackle this problem, although other Shaiva scriptures say that God creates the universe out of play (*krīdā*) or in order for beings to be liberated.

2. *God hidden in the world.*

We might generalise, therefore, that according to the Shaiva scriptures and their monistic commentators, God is hidden in the universe, concealing himself from himself in order that beings can realise their identity with him and also for no reason other than play (*krīdā*). In a striking image, Somānanda compared the hiddenness of God in the universe to a king who plays by concealing himself as a common foot soldier:

Through playfulness the supreme Lord assumes the bodies of dwellers experiencing the impenetrable ocean of hell, who know suffering by the fruits of their actions. As a universal king, elated by the joy of power, by the right of his own law, plays at being a foot soldier, so the Lord plays, whose nature is joy.⁹

God, therefore, hides himself in the universe as an intentional act, as play (it is God's nature to do so) and in order to be found (which is to be liberated).

In cosmological terms the metaphor of God's withdrawal is conceptualised as contraction, but another fairly common image is one of hiddenness and secrecy. God is the greatest secret hidden in the heart. 'Tell me this secret, this great secret, O my Lord,'¹⁰ says the *The Supreme Trident* on which Abhinavagupta's commentary tells us that the secret is the pure wisdom (*śuddhavidyā*) that God is, in fact, hidden in the heart as the true self. By taking the 'tell me' as an active rather than a middle case imperative, he reads the 'tell me O Lord' (*kathayasva mama prabho*) as 'tell me O Lord who is my self' (*kathaya sva mama prabho*), that is, the Lord as pure subjectivity, *svamama* (my

self), he tells us, means the one who is full of I-consciousness (*abantiā*) to whom the universe (as distinct) is simply nothing (*na kimcī*).

The great secret is that it is not God who is absent, but the universe as differentiation that is absent. God only appears to be absent from the perspective of ignorance that does not recognise this higher wisdom. The very grammar of the texts for Abhinavagupta is an invitation to understand the hiddenness and unknowability of God – an invitation from God himself to lead the practitioner to a realisation of their identity. The genitive case usually denotes a distinction between the possessor and that which is possessed, but here ‘of mine’ (*mama*), says Abhinavagupta, denotes the absence of anything apart from the ‘I’.

In this kind of textual reasoning, the apparent absence of God is taken to be that God is concealed within the heart of all beings and, indeed, within the heart of the cosmos itself. Waking up to this truth is waking up to the knowledge that the self and the Lord share the same essence (*sāmarasya*, ‘sameness of flavour’) which is also the recognition of the highest level of representation.

Abhinavagupta discusses the sign (*linga*) of God as both concealing his true nature and revealing it. The sign (*linga*) must be understood at three levels as manifest, manifest-unmanifest and unmanifest. The manifest sign (*vyākṛta*) is an outer form (*bahirūpa*) of God as a particularised vibration (such as an image/icon); the manifest-stems of cosmology or paths (*adhvan*), but it is the unmanifest sign which is the true nature of God identified with the ‘supreme heart of tranquillity’. Abhinavagupta’s commentator, Jayaratha, equates this truth concealed within the sign as awareness of absolute subjectivity whose nature is the vibration of consciousness (*samvitśpanda*).¹¹ The manifest sign points to the unmanifest sign and can be understood as the external expression of this hidden or inner meaning. The absence of God in the external sign is actually an indication of the hidden or inner presence of God, the unmanifest sign.

3. God hidden in the body

In Abhinavagupta’s second meaning of sign, the manifest-unmanifest, we have the idea that the entire universe itself, as well as the essence of the universe, is contained within the body. The body becomes a sign which both

conceals the presence of God and reveals it. This is a well-developed theme in the tantric traditions. One text of note, wrongly attributed to Abhinavagupta but nevertheless emerging from the same thought-world, is the 'Hymn to the circle of deities located in the body' (*debasthadevatācakraśtotra*). This hymn is from the Krama system which Ksemarāja refers to (see above) and is a more specific account of the Goddesses outflowing from pure consciousness. Here God is the wielder of power and power itself in the forms of the deities Ānandabhairava and Ānandabhairavī. They are worshipped in the lotus of the heart by the Goddesses of the senses who make offerings to them of the objects or spheres of the senses.¹² Thus Kaumārī is the Goddess of Sight who offers flowers of colour to Ānandabhairava, and his consort offers flowers of sound, and so on.

The Lord is hidden within the heart, and while at one level the body is a sign of his absence, it is also a sign of his presence as the Goddesses of the senses are signs of his presence. The deity within the heart entices devotees to further enquiry, to further efforts, and as we move further in, we find that the Lord is in fact Goddess, the destroyer of time (*kālasamkarsinī*), a term which can also be interpreted as a form of time that attracts or pulls devotees towards her. This double meaning of the Goddess who destroys time and entices or draws us to her is the heart of the teaching of recognition.

Concluding remarks

What is striking about this material is that the theological language is tradition-specific and resists easy translation into other terms. The terminology is highly complex, and different systems of deities are used by theologians such as Ksemarāja to make a point about the unity of consciousness and the identity of all differentiated appearance with it. While Ksemarāja and his fellow monists are keen to express their views in a non-theistic language, nevertheless they use a reinterpreted theistic language. The theme of the apparent unknowability of God through absence is articulated in terms of concealment, in terms of secrecy, and in terms of a wisdom, of such a kind that we must recognise this hidden power with which we are ultimately identical. In

this tradition God is our essence beneath the limitation of the subject of first person predicates distinct from the objects of experience. The true (and only) subject is supreme I-ness (*abantiā*), Shiva or the Goddess, revealed in scripture.

Even so, there was a dualist Shaiva tradition which used the language of the five acts and the language of concealment and which differed from the monistic understanding we have examined here, by claiming that God is ultimately unknowable because, in his totality, he is eternally out of reach: his totality exceeds us although we can become like him through his grace. While using the same images of concealment, this language of eternal distinction is rejected by monists such as Kṣemarāja for whom concealment is of our own nature and within our power to dissolve.

In the context of a comparative theology we are left with more problems than solutions. That the theme of God's absence as withdrawal can be located in Hindu theologies is surely significant for us, but what that significance is, is not precisely clear. The particularity of the theological system, the specific use and development of a technical terminology, needs to caution us against its easy assimilation into other, universalising terms (although we must recognise the universalist nature of the tradition's claims themselves and the sometimes aggressive colonisation of dualist discourse). Kṣemarāja's understanding of Shiva as consciousness is clearly not the same as the Christian trinitarian God, and Indian doctrines of reincarnation are quite different from Christian, Muslim and Jewish eschatologies.

But that there are significant theological differences does not entail a pure relativism. Theologies themselves tend to maintain totalising claims (indeed, they have to do so, because different theologies present what they perceive to be truth, and theistic claims to truth must be preserved and transmitted correctly through the generations). Yet in spite of the totalising claims of theologies, we can see overlapping theological concerns across the traditions, such as the idea that the human condition is in need of repair, that such repair can be meaningfully spoken of in theological language, however qualified, and that this repair is intimately connected with discovery of that which is hidden and seems initially to be unknowable. The revealing of God from his concealment is critical, and is linked to the freedom from a restricted human condition. There is a structure in the Indian theologies recognisable to Western theologies; a structure of invitation to respond to

grace, to come deeper, to search harder, to shake off restriction and transcend limitation in the case of our knowledge of God.

Notes

- 1 I have used anglicised versions of common Sanskrit terms and names such as 'Upanishads', 'Krishna', 'Shiva' but have retained accepted transliteration when citing Sanskrit terms in brackets and in quotations in the notes.
- 2 E.g. H. A. Giles, tr., *The Travels of Fa-hsien (399-414 AD) or Record of the Buddhist Kingdoms* (Cambridge: Cambridge University Press, 1923), pp. 16–18.
- 3 P. Ricoeur, *Memory, History, Forgetting* (Chicago: University of Chicago Press, 2004), pp. 7–15.
- 4 For an account of these traditions see Alexis Sanderson, 'The Śaiva and Tantric Traditions', in S. Sutherland *et al.*, eds, *The World's Religions* (London: Routledge, 1988), pp. 660–704.
- 5 Abhinavagupta, *Parātrimśikavivarana*, 1. p. 40. Text and translation, Jaideva Singh, *Abhinavagupta: A Trident of Wisdom* (Delhi: MLBD, 1989).
- 6 Ksemarāja, *Pratyabhijñāhṛdaya*, ed. J. C. Chatterji, Kashmir Series of Texts and Studies 3 (Srinagar: Government, 1911), vss 9–10.
- 7 Ibid., vs. 11.
- 8 Ibid., vs. 1, p. 2.
- 9 Somānanda, *Śivadrsti*, ed. M. S. Kaul, Kashmir Series of Texts and Studies, 54, (Srinagar: Government, 1934), 1. 3 6-3.
- 10 *Parātrīśika*, vs. 2.
- 11 Abhinavagupta, *Tantrāloka* 5.112b-113a and commentary, Kashmir Series of texts and Studies, ed. M. Sastri (vol. 1) and M. S. Kaul (vols 2–12) (Srinagar: Government, 1918–38). French translation Lilian Silburn and André Padoux, *La Lumière sur les Tantras: La Tantraloka d'Abhinavagupta chapitres I & 5* (Paris: de Boccard, 1998).
- 12 *Debasthadevatācakerastotra*, H. Sri Ragunath Temple Manuscript Library, Jammu, pp. 205–6, 290–2. Xerox courtesy of Alexis Sanderson. French translation based on different manuscript by L. Silburn, *Hymnes aux Kali, La Roue des énergies divine* (Paris: de Boccard, 1975), pp. 85–6.

Some Theological Reflections on Buddhism and the Unknowability and Hiddenness of God

Paul Williams

Whatever else God is, God is Creator and God is teacher. This is not intended as a definition of God, merely an enumeration of two important characteristics of God that I assume are non-controversial. By ‘Creator’ I mean with Aquinas that we apply the term ‘God’ to whatever it is that is the answer to the question ‘Why is there something rather than nothing?’. Whatever answers that question, Aquinas tells us, ‘we all call “God”’.¹ We are not here committed to the truth of any further proposition about God. ‘God’ simply is the word used to mark the answer to our question ‘Why is there something rather than nothing?’

And by ‘teacher’ I mean one that reveals something to us that otherwise is not known. And because God is also the Creator, there are some propositions that can be known to be true, if they are true, only because God has revealed them. An example might relate to the final purpose of Creation, or the nature of the Creator. I take it also that just as God as Creator has the nature of ultimate efficient cause – the final termination of any series of ‘Why?’ questions – God as teacher must stand as final revealer – the final revealer of ‘Why?’ answers. And as the final revealer of ‘Why?’ answers it seems to me that terms like ‘intention’ – revelation is *intended* by its revealer – can appropriately be used (albeit analogically) of God.

It is often thought that God characterised in this way as both Creator and teacher is absent from Buddhism. And generally that is correct. Buddhists may put forward an answer (depending on the school) to the

question ‘Why are things the way they are?’ – due to dependent origination, or non-dual awareness – for example, or an answer to the question ‘How are things truly?’ – maybe truly all things are empty of their own intrinsic existence.² And Buddhists certainly answer the question concerning the final revealer: one who, seeing things the way they really are (*yathābh-tadarśana*), and out of his compassion reveals it to others, is a Buddha. And there are many such Buddhas; indeed in Mahāyāna Buddhism they are infinite throughout infinite time and infinite space.

But the answers to the two questions are different. The final way of things is how it is – not-Self (*anātman*), or emptiness (*śūnyatā*), the very quality of lacking intrinsic existence, for example, or alternatively (depending on doctrinal school) non-dual awareness (*advayañāna*) – while the final teacher is the Buddha, one who was once a human being like us and who became a Buddha through, *inter alia*, coming to understand in the deepest possible way the final way of things. That final way of things is impersonal – it just is the way things truly are – and cannot *itself* be spoken of as a teacher except in a metaphorical way. It is necessarily one, and one only. Buddhas are multiple. So for a Buddhist, it seems, the following proposition would here be *false*:

- (i) The final way of things *intends* to reveal a set *X* of true statements about *p*.

Thus two essential characteristics of God – He Who Is (most fully real) and is also Supreme Teacher – as I have portrayed it, would appear to be lacking in Buddhism. And we can say more. There are trends within Mahāyāna Buddhism (although by no means universal) that would grant the *dharmatā*, the true final nature of things, the status of a positive existent reality (and not just an absence, like the absence of a self, or the absence of intrinsic existence, for example), primordial and non-contingent, unchanging and absolute.

These are trends more often than not broadly associated with certain interpretations of what is known as the *tathāgatagarbha*, the embryo, seed, or womb of the Tathāgata (Buddha), commonly known (in Buddhist English) as the ‘Buddha Nature’, that factor primordially present within

each sentient being which renders possible the unconditioned state of enlightenment. There is a positively characterised absolute reality present in all sentient beings, perhaps in all things, and this reality present in us sentient beings is what gives us the possibility of becoming Buddhas. And that *tathāgatagarbha* as primordially enlightened and hence intrinsically pure, untainted by moral or cognitive obscurations, can indeed be said to be responsible (in a non-intentional sense) for the many virtues possessed by a Buddha. Also it is that which, since it is within us as our own enlightened Buddha Nature, in a way (again, through simply being rather than through intentional guiding action) leads us on to enlightenment.³

Yet it seems that, as the notion of the Buddha Nature is normally employed in Buddhist discourse, we could not call that primordially existent non-contingent reality ‘God’ in any sense acceptable to mainstream theistic traditions, as a loving Creator intentionally creating the universe and all that is within it and guiding the universe to ‘Him’ as its teleological end, goal and fulfilment. I urge support for this from the thirteenth/fourteenth-century Byzantine theologian Gregory Palamas:

[D]oes it possess the faculties of knowing, of prescience, of creating, of embracing all things in itself; does it possess providence, the power of deification and, in a word, all such faculties or not? For if it does not have them, this essence is not God, even though it alone is unoriginate.⁴

This God, it seems, is lacking (and *ipso facto* is unknowable because not there to be known) in Buddhism, and hence the *hiding* of God – unless one sees all of Buddhism as an example of the hiding of God – would seem to be unknown in Buddhism too.

And yet not completely. I want to respond to our problematic – the unknowability and the hiddenness of God – from within the Buddhist tradition by referring to one particular text. That work is known in Tibetan as the *Byang chub kyi sems Kun byed rgyal po*, the ‘Awakened Mind, the Sovereign who is the Creator of All’.⁵ It describes itself as a tantra (Tibetan: *rgyud*), one of those Indian texts that in origin exemplify overriding concern with ritual, particularly magical ritual, but also often contain a great deal of devotional, meditative and doctrinal content within which tantric ritual is embedded.

And the *Kun byed rgyal po* (pronounced: Kern jay gyel po; for short, the *KBRP*) is atypical. For within it we have Samantabhadra ('He who is Good in all Ways') Buddha, as himself the final true nature of things, speaking, instructing, teaching the ultimate truth and revealing how he is indeed the 'Sovereign who is the Creator of all'. In other words the *dharmakāya* teaches, combining in one substratum the two dimensions of final ontological explanation and final teacher, which are normally kept separate in Buddhism, and *in that respect* putting into play two of the essential characteristics of a theistic God. Two, and indeed more. For there is a strong case that Samantabhadra in the *KBRP* also possesses in Palamas' terms 'the faculties of knowing, of prescience, of creating, of embracing all things in itself' and 'providence, [and] the power of deification' as well.

The *KBRP* is atypical, and is not accepted as in any uncontroversial sense an authentic tantra – and thus as an authorised teaching of the Buddha – by many schools of Tibetan Buddhism. It is a Mahāyāna text, and is thus de facto apocryphal for a great many Buddhists. For Tibetan Buddhists it is best known in its context within the *rNying ma rgyud 'bum*. This is a collection of tantras accepted as canonical, in the overwhelming majority of cases, only by the rNying ma pa school. The rNying ma pa trace their texts and traditions back to the First Transmission of Buddhism to Tibet (from the seventh century onwards), in contrast to the reintroduction of Buddhism in the Second Transmission from the late tenth century.

The authenticity of texts was important to those engaged in reintroducing Buddhism at that time. The *KBRP* was suspected to be inauthentic. Recent scholarship has suggested that at least one of its eighty-four chapters could not have been a translation from a foreign language. It thus must have been composed in Tibetan.⁶ No matter, it is this text – highly authoritative for at least one major Tibetan Buddhist tradition and hence for our purposes quite authentically Buddhist – I want to use in considering the unknowability and hiddenness of God, the elusiveness of Samantabhadra.

I first give some quotations to illustrate and summarise what the *KBRP* wishes to say about the ultimate way of things, and its constant unavoidable presence as well as its paradoxical elusiveness. Samantabhadra, the

final ultimate truth of things, speaks addressing the Buddha Sattvavajra, his interlocutor who while being his own emanation also stands for each one of us in our primordially enlightened state:

Listen, great being . . . I, the supreme source, am the sole maker and no other agent exists in the world. The nature of phenomena [Tibetan: *chos nyid*; Sanskrit: *dharmatā*] is created through me, the three teachers manifest from me and the three classes of disciples arise from me. The very manifestation of existence [*chos nyid dgod pa*] depends on me. . . . I am the supreme source, I am pure and total consciousness⁷ that is all-accomplishing. Before I existed, there was not the fundamental substance [Tibetan: *nying po*; Sanskrit: *garbha?* *hr daya?*] whence all phenomena originate. Before I existed, there was not the supreme source whence everything springs forth. Had I not existed, no teacher would ever have appeared. Without me, no teaching or assembly of disciples would ever have appeared. Sattvavajra, have no doubts! You yourself, great being, are an emanation of my nature. . . . I am the oneness [*gcig pa*] of the fundamental condition [Tibetan: *de bzin nyid*; Sanskrit: *tathatā*], and precisely this is the reality of all phenomena [*chos rnam kyī chos nyid*; Sanskrit: *dharmadharma*]: there is only me, pure and total consciousness.⁸

Hence Samantabhadra, the primordially existing creator of all, is the nature of pure, uncontaminated, enlightened consciousness. Not only are all things the manifestation of this pure enlightened consciousness, but it is portrayed as actively engaged both in creating and also in teaching and in liberating – possessing indeed all of Palamas' qualities necessary, if not sufficient, for God. Liberation here is self-liberation, for in reality – that is, from the point of view of liberation – there is only Samantabhadra. And Samantabhadra is liberated already:

Listen, great being! My nature [Tibetan: *rang bzhin*; Sanskrit: *svabhāva?* *prakṛti?*] is unchanging: if you meditate on it, you are trying to correct and transform it. I am original self-perfection: if you try to achieve me through effort, you will alter me.⁹ You cannot reach me by treading a path. You do not find me by seeking. You do not purify me by training yourself. Have no view about me: I am beyond (being an) object! Do not tread a path to

reach me: I am beyond a path! Do not train yourself to purify me: I am beyond hindrances! I have no abode whatsoever and cannot become an object to which to address the mind. I know no conceptual elaborations and transcend the objects of thought. All the phenomena conceived by the mind are only my nature [Tibetan: *ngo bo*; Sanskrit: *svabhāva? prakṛti?*]. Whoever seeks to reject or to block them will not encounter me, the source, for another three kalpas: in reality, that which they believe they must reject is my very nature itself [*rang gi ngo bo*]. . . .¹⁰

Thus, from the point of view of truth, liberation lies in letting everything be just as it actually is. There is no path to liberation, there are no stages to liberation, and actually there are no practices that have to be performed to become liberated. One's own consciousness is at root Samantabhadra, primordially and unchangeably. As Samantabhadra one is liberated – enlightened, a Buddha – already.¹¹ Thus one simply has to recognise what one always has been, and cease struggling to be otherwise. One just relaxes into what is there already.

Self-arising wisdom [*rang byung ye shes*], the essence of dharmakāya [*chos sku snying po*], is not realized through effort, but conversely, by just remaining in the natural condition [*rang bzhin gnas*]. . . . If instead one leaves the natural condition as it is, without following a gradual path, one self-liberates. . . . Even though I manifest clearly in front of everybody, the disciples of the three dimensions [*sku gsum*; 'three bodies'] (try to) understand me (enclosing me) in concepts [*rnam rtog grangs su rtogs*]. However the state of the supreme source is so deep that, however much they scrutinize it, they do not see it. . . . When you recognize that the true nature of realization does not depend on progress [*sa yi rang bzhin shyang med 'di rtogs na*], you will finally abide on the level of pure and total consciousness, the source! . . . I am the supreme source, pure and total consciousness, and as I transcend all assertions and negations, I do not think of anything and do not meditate on anything! I do not correct body, voice, or mind. I let them relax.¹²

What Samantabhadra wants to say then is that one either gets the point and relaxes, letting go the striving, realising the presence of Samantabhadra

in all things as the nature of one's very own conscious awareness, unavoidably present and in its own nature pure, radiant, hence enlightened – or one does not.

And there is another all-pervading dimension to Samantabhadra in the *KBRP* alongside the nature of consciousness. That is Samantabhadra as what Gregory Palamas would call 'uncreated light':¹³

The referential sphere of [true] understanding is great bliss / It is the world that is purity / Due to the coagulation there of restricted light / The four [principal] directions, the intermediate [directions], above and below, are established / From the colours of the rainbow, [as yet] undetermined / There manifests distinctly and clearly the [five Buddha] families / Like that, by means of the five [primary] elements, [in the form of] mobile and immobile atoms, there is the great primordial mass (Tibetan: *gtso chen*; Sanskrit: *mahāpradhāna*).¹⁴

In other words, just as all is the play of the nature of primordial consciousness so it is also the play of 'uncreated light', which (presumably on the model of white light refracted in a prism) plays itself out into light of the five colours of the rainbow which then 'crystallises' into the five elements of (as they are usually given) earth, water, fire, air and 'space' (or what fills space, in Sanskrit *ākāśa*). These then combine to make up all of the objects of the material world. Thus Samantabhadra is the very light – indeed the light of consciousness – in which we live and also that by which we see.¹⁵

I now deliberately introduce the word 'God' for Samantabhadra in order to relate the contribution of the *KBRP* more closely to the themes of our inter-religious and cross-disciplinary discussion. It should be remembered, however, that my use of 'God' here is simply a heuristic device. I do not intend in using 'God' to beg any questions of whether this is really a satisfactory substitution for 'Samantabhadra' here. Indeed, I shall return to this topic below.

One either realises God present in one's very own awareness, one's very own being as a conscious subject of experience – or one does not. One either realises the very light by which one sees, and all things, as

pervaded with that light of God – or one does not. From this perspective God is, if you like, pursuing us (as in Francis Thompson's famous poem *The Hound of Heaven*). Absence of God is *our* running away. *God* is always present, for God can never be otherwise than present in the way that God is present for us, as the very condition for there being anything at all.

Thus if we are aware of existence – it can be our own existence or the existence of anything else – it is possible to be aware of God's presence in that existence. But we can fail to be aware of that possibility, and hence (derivatively) of that presence. Or we can be aware of God's presence and lose it. But the loss is not because God has gone anywhere. God does not – God, I would suggest, *cannot* – hide (or indeed be unknowable) for God cannot be other than God. If there is creation God cannot go anywhere – God has to be present (with 'has to' expressing logical necessity) where creation is present. Outside that of the *KBRP*, in an explicitly theistic context, we might say that if we are aware of existence at all it is always possible to become aware of radical contingency and hence our dependence on God, that is, our own createdness. In an explicitly theistic context, awareness of radical contingency springs from our coming to realise that there could literally have been nothing at all rather than something. Hence all things are created, and necessarily created out of nothing. Our response to an awareness of radical createdness can only be an equally radical (a correspondingly deep) *gratitude*.

In this explicitly theistic context we might talk sometimes of the presence of God, and the absence of God. But what we can learn from Samantabhadra in the *KBRP* is to deflect this way of speaking instead to a talk of *awareness* of the presence of God, and *loss of awareness* of the presence of God. And, whether due to Original Sin or due to primordial ignorance (Sanskrit *avidyā*, deflection from seeing it as it is), we are not born with an awareness of the presence of God. If we do not have that awareness, or if we lose it, we need help. To be made aware, to see it, to 'get it', what we require is someone who is already aware of that presence and who can introduce us to it – that is, we need an enlightened *guru*. Loss of God, the absence of God, the hiddenness of God, the

apparent unknowability of God, is something about *us* (Samantabhadra might urge), about our own state of awareness. We cannot (the *KBRP* wants to say) search for God, we cannot follow sequential stages that are guaranteed to issue in a discovery of God. But we can through the guru be made aware of God's unwavering presence.

In the *KBRP*, since there is no step-by-step method to follow, one cannot be aware of the nature of one's own enlightened consciousness except by living it. Samantabhadra expresses this as 'if one is not on my level, the diverse levels of understanding that can be attained are merely projections of personal concepts [in other words, of one's *unenlightened* mind] and do not allow one to meet me, the source'.¹⁶ The condition of one's becoming enlightened is that one already is enlightened. Thus the real guru as condition for enlightenment is the nature of one's own enlightened mind, that is, Samantabhadra himself:

Listen! The pure and total consciousness of each being of the three worlds without exclusion is the true teacher. For those who, after hundreds and thousands of kalpas, have not understood that their own mind is the teacher, I, the supreme source, manifest as the teacher of their mind: listen to this teaching!¹⁷

Samantabhadra is the 'inner guru'. The external guru is Samantabhadra manifesting in the form of one's teacher in the world. And the *KBRP* notes the moral and spiritual qualities necessary for the pupil in order to be a suitable recipient for these saving teachings. A particular quality – a common quality in Indo-Tibetan texts on devotion to the all-important guru – is the spirit of renunciation, renouncing one's entire being into the hands of the guru who, to be the guru, must be (and hence must be seen as) enlightened as Samantabhadra:

In brief, one's body and life too must be offered up, let alone material things, land and livestock! Even though they do not need them, the teachers will accept all things and offer them to the Three Jewels [Buddha, Dharma, Samgha].¹⁸

The inner guru, of course, can never be absent. That is a condition of spiritual fulfilment. And of course if the inner guru is present there is nothing more to do, nowhere else to go. But the external guru, whether Buddha Śākyamuni or any of the other great teachers of Buddhism, can very much be absent. Finding the guru is a significant practical and pedagogical theme in later Indian and in Tibetan Buddhism.

Even much earlier we find evidence in India and beyond that the absence of Śākyamuni Buddha after his death – the loss of the most important guru – was keenly felt to be counteracted by visualisation practices that allowed one to feel as if still in his presence – even to see him in visions – or perhaps by other techniques that might allow one after death to be reborn on another plane where Buddhas or Buddhas-to-be (*bodhisattvas*) are still present and able and willing to help the aspirant on their spiritual journey.¹⁹ The Buddhas might be present in their properly consecrated and empowered images, and religious activity directed to those images could tide one over in periods when acutely felt absence is oppressive. But in the last analysis the absence of the Buddha has to be a failure of awareness, a failure of gnosis, to be overcome through one's own transformative vision facilitated by others who have done it already.

In Indo-Tibetan Mahāyāna, and particularly tantric sources, the search for the guru is often illustrated with vivid 'pilgrim's progress' stories such as that of Nāro pa's twelve-year search for Tilo pa. Repeatedly we see Nāro pa nearly finding his guru only to lose him again until, having gone through a testing of excruciating endurance and a purification of obstructing spiritual blockages caused by previous wicked deeds (Sanskrit: *karman*), Nāropa was sufficient ready for the reciprocating grace, the saving teachings and (in the common tantric setting) all-important initiations. And every Tibetan knows the story of Mi la ras pa (Milarepa) and his trials at the hands of his guru, Mar pa. All are familiar too with Mi la's constant invocation of Mar pa at the beginning of each of his songs. Indeed, absence from the guru, meditating alone in the mountains, sometimes could almost overwhelm even a hardened ascetic like Mi la ras pa.

Thus the role played in theistic contexts by the occasional felt loss of God, by God's 'withdrawing Himself', as it were – by the hiddenness of God – is played in the context of the *KBRP* by the elusiveness of the

guru. It is often suggested in these Indo-Tibetan sources that once the correct guru has been found, the guru with whom one has an ancient karmic relationship, and the special guru–disciple relationship established (or, perhaps more accurately, recognised) enlightenment is sure to follow. And from then on in reality the guru is always there ‘to the end of the world’.

This is not just because the inner guru is always present, but also because the external guru is constantly present for us too since he (or she) is both not different from the inner guru and also a person pervaded by the mysterious power – the miraculous abilities – of the ‘Otherworldly’ (here, in *this* Buddhist context), the Absolute. Even after death the external guru can still appear to his disciples. And the proper guru knows just how to teach to his disciples that which apparently cannot be taught, pointing out that which cannot be indicated.²⁰ This is through an inner bond, inexpressible – although perhaps expressions too may sometimes be appropriate precisely *because* the way of teaching is and has to be non-conceptual, inexpressible, and hence cannot be tied down as inexpressible either

Thus the hiddenness of God cannot be the hiddenness of God, the unknowability of God cannot be the unknowability of God, and the withdrawal of God does not occur. But we can fail in our awareness of God, simply because we have not yet made contact with the right guru. Or perhaps we have, but we have not yet followed his instructions. Or maybe we have followed them to the letter, but still there are our own personal blockages due to *karman* that are preventing us from seeing the truth. The *KBRP* teaches (in common with all Buddhism) that fundamentally all failure to see the truth is the result of blockages, obscurations, arising from the three root poisons of greed, hatred and delusion. Most significant of these is delusion – not seeing the truth is now because we have since beginningless time failed to see the truth. Thus just as God does not hide, does not withdraw His presence from us, the *KBRP* is quite clear that our failure in awareness of Him – as is the case with our failure to find or to follow the guru – is also *our own fault*:

On seeing that their mind is the fundamental condition [Tibetan: *de bzhin nyid*; Sanskrit: *tathatā*], all the beings of the three worlds will no longer

remain at the level where enlightenment is merely a word but instead will immediately attain the supreme yoga. (Conversely,) however much (the true meaning) is disclosed to them, the unfortunate ones who do not have appropriate karma will not understand, just like someone who, wishing to obtain a precious jewel, cleans a piece of wood in vain.²¹

Realising that our failure to see God is our own fault, and yet realising also that seeing God involves relaxing into the true nature, beyond all striving, sets up an interesting tension where, on the one hand, the hiddenness of God can provoke actions of purification – perhaps for a theist of penance and prayer, for example – and, on the other hand, a sort of deep letting-go, a reliance on the guru or, again for the theist, a realisation that one is in the hands of an absolutely loving Father who has not and never will really withdraw from His children. Perhaps the response is in both cases a particular sort of trust – of faith – a particular sort of very profound non-striving.

Of course, I do not want to commit myself to Buddhist agreement with all of this explicitly theistic reading of Samantabhadra in the *KBRP*. Indeed, it seems to me that awareness of all as the play of one's own pure enlightened consciousness precisely whatever else it would entail would *not* (in itself) lead to radical gratitude. This in itself might suggest that there is finally something awry in equating Samantabhadra with God as understood in an Abrahamic theistic context. Awareness of God entails (should entail, it seems to me) radical gratitude. Awareness of Samantabhadra does not, at least, not the proportionately deep radical gratitude that comes with mute, helpless, awareness of radical contingency.

Samantabhadra is present to us in our very subjectivity, but lost in its dualistic and associated conceptualising obsession: 'enlightenment [Buddhahood] is not something other than consciousness' (Tibetan: *sems*; Sanskrit: *citta*; *sangs rgyas sems las med*²²); 'the root of existence does not lie outside oneself' (*chos kyi rtsa ba rang las med pa*).²³

So, first of all, one must teach in a precise manner the nature of one's consciousness. Once it has been communicated, one encounters the infallible

path that transcends seeking and from the very first moment, one is on the level which does not entail effort.²⁴

The search is through interiority. God can be found through an inner ascent. But because it refers to consciousness, that is, mind, it seems to me the *KBRP* never really escapes the subjectivity of interiority. There is no transcendence to a source beyond interiority that is thence free from the taint of solipsism. Samantabhadra is non-conceptual, completely beyond conceptual attribution. And yet that cannot be true in every sense. For it has to be true that Samantabhadra is the final real nature of our very own consciousness. It has to be true, therefore, that Samantabhadra is something to do with our own consciousness. If that were not true then what would Samantabhadra be to *us* – what would be the point of the *KBRP*'s argument relating Samantabhadra to consciousness? The true nature of consciousness, as prior to and before all things, must be non-conceptual and yet it is still the true nature of consciousness. Indeed it seems it is non-conceptual just *because* it is the true nature of consciousness.

But while this must be the case, it also again shows that Samantabhadra cannot be God in the Thomist sense of the reason why there is something rather than nothing. For consciousness is a generic term abstracted from individual acts of consciousness, acts of awareness. And any individual act of awareness comes within the scope of the question 'Why is there something rather than nothing?'. Any individual act of conscious awareness – and thus consciousness as such – could always *not have been*. When we ask why is there something rather than nothing we are including the question why are things such that the individual act of consciousness *X* can occur? Any such act cannot therefore be a necessary being in the way that God – if there is to be a God – has to be a necessary being. Thus anything to do with consciousness, including the true enlightened nature of our own consciousness, cannot be God in the sense in which Aquinas posits God.

Samantabhadra is moreover not the Self beyond all self in the way that in Śrī Vaiṣṇavism, for example, Rāmānuja's God is the Self for whom even all our true, authentic, selves are in some sense fundamentally other. God, for Rāmānuja, is the Divine Self ensouling our souls and transcending any

sense of *our own* subjectivity and hence our own consciousness. As the pure primordially enlightened nature of consciousness – or ‘uncreated light’ – Samantabhadra is in a sense the primordial prerequisite for all as experienced. He is, perhaps, solipsistically the cause of all. But, it seems to me, he is not the *Creator* in Aquinas’s sense, the answer to the question why is there something – anything at all – rather than nothing and thus Creator quite literally out of nothing. Indeed, it is important to those Buddhists who follow the *KBRP* precisely to make this point and to distinguish their position from any suggested reduction to theism. As the modern Tibetan rNying ma pa practitioner Namkhai Norbu states in his comments on the *KBRP*:

If we deem Samantabhadra an individual being, we are far from the true meaning. In reality he denotes our potentiality that, even though at the present moment we are in saṃsāra, has never been conditioned by dualism. . . . Samantabhadra means our state, and should not be interpreted as God in the sense of a supreme entity who is the only creator, for example.²⁵

Consciousness as the necessary cause of all *as experienced* (i.e., a tautology) is not the same as God as the Creator of everything literally out of nothing. ‘Uncreated light’ radiating out into the five colours of the rainbow and thence to the elements and material reality (reality as crystallised or congealed light) is still light, and light – as Palamas realised – points beyond itself to the God on whom it depends. At the point at which one realises Samantabhadra one recognises that Samantabhadra is fundamentally one’s own enlightened awareness. And one cannot be grateful – at least (I urge), not deeply *radically* grateful – to oneself or indeed to anything about oneself. Samantabhadra is someone to recognise – that is, in behavioural terms, to know (seen in gnosis, in *jñāna* or *prajñā*) – rather than someone to be grateful to for creation, for our radical contingency (in behavioural terms, someone to worship). One recognises the enlightened nature of consciousness as something primordially true about oneself – one’s own Buddha Nature – but one worships God as the appropriate response to discovering something about oneself, that is, discovering not one’s own enlightened awareness but one’s own radical contingency. For the *KBRP* one’s

own enlightened awareness is the final discovery, as well as the final goal. It is absolute, there is nothing beyond this. But radical contingency necessarily refers beyond itself to (analogously) 'something else', that upon which (if there is to be anything at all) all things depend.

Let me clarify still further. I have suggested that Samantabhadra in the *KBRP*, as the true nature of our own consciousness, in the last analysis cannot be equated with the God of the Abrahamic traditions. That Abrahamic God is necessarily beyond, but beyond as the Creator of everything including the true nature of our own consciousness. But equally it appears that we cannot know such a God in our own consciousness. Our own consciousness only ever knows those things adequate to our own consciousness. In this sense such a God is apparently also *necessarily absent* to us, and hence apparently necessarily unknowable too. I illustrate this here by bringing in the fifteenth-century writings of Nicholas of Cusa:

According to the theology of negation, nothing other than infinity is found in God. Consequently, negative theology holds that God is unknowable either in this world or in the world to come, for in this respect every creature is darkness, which cannot comprehend infinite light, but God is known to God alone.²⁶

Interestingly in the present context, Nicholas reaches this position through an 'inner ascent' that bears some similarities to reflective meditative processes that would be known not only in the world of the *KBRP* but also found in much older Indian sources such as the *Chāndogya* or the *Bṛhadāraṇyaka Upaniṣads*. Let us consider here Nicholas's little work *De quaerendo deum* ('On Seeking God'). His method is to start from the world and to pass through it to the transcendence of it:

'[T]his world must assist whoever seeks God, and the seeker must know that neither in the world nor in all that a human conceives is there anything similar to God.'²⁷

Just as the act of seeing (*visio*) is quite different in status from objects seen, and (as it were) from the point of view of objects seen is beyond all

conception save higher than them, better, and more beautiful and perfect, ruling over them, so one can say the same for the other sensory acts and their corresponding objects. One can also make the act of seeing and the other sensory acts the objects of the coordinating and integrating ‘common sense’ (*sensus communis*), which is correspondingly superior to them. One can ascend further, through ‘the intellect which is above all intelligible things that are rational’ and ‘apprehends the rational’ – and is thus not itself within the range of the rational – to that which is beyond the intellect:²⁸

... the one whose name is not intelligible, although it is the name that names and discerns all intelligible things. And that one’s nature infinitely precedes all intellectual wisdom in loftiness, simplicity, strength, power, beauty, and goodness, since compared with that one’s nature everything inhabiting the intellectual nature is a shadow . . . Therefore, you can run along this path on which God is found . . .²⁹

Through such a method one can find correctly what God is, beyond the senses, the common sense, and the intellect. But what God is, is nevertheless incomprehensible to us. And Nicholas also brings in the senses and other cognitive elements not just as existent but also as knowing. For it is *in their light* that knowledge takes place. Thus each knows because it is illuminated by a higher light (*lumen*), just as the act of seeing takes place through illuminating the object seen. Hence corresponding to the ascent of higher existence is an ascent of higher illumination. On this understanding God becomes the supreme light, or rather since the supreme light cannot actually be a light in any way we can make sense of, God is the supreme source of light, that illuminates each intellect and thereby eventually illuminates objects known in all acts of knowledge:

In God’s light is all our knowledge, so that it is not we ourselves who know, but rather it is God who knows in us. When we ascend to the knowledge of God, although God is unknown to us, yet we are moved only in God’s light, which transmits itself into our spirit, so that we proceed toward God in God’s light. Therefore, just as being depends on God, so does being known.³⁰

Thus, as with the *KBRP*, God for Nicholas is constantly present in our very acts of awareness. Yet we should note that for Nicholas *that whereby* we see precisely cannot itself be seen, and this preserves him from an otherwise unstable perspective (found also in Augustine and derived from his Neoplatonic heritage) whereby God is both transcendent as the Creator and at the same time present in the very acts of my own consciousness and thus very close to becoming something *about me*, about my own interiority. That whereby *X* is *X* is not itself *X*. That whereby I see, the very light that renders consciousness awareness, as such transcends conscious awareness itself. It cannot itself be an object of my conscious awareness. The ascent to God which Nicholas outlines in *De quaerendo deum* necessarily involves a leap, a transcendence, beyond elements of one's own cognitive apparatus and beyond all the created world. And that leap is to God as something unknown to us (save through His own self-revelation).

At the end of his little work Nicholas outlines briefly a way that he says explicitly can be applied within oneself, a way through the removal of limitations.³¹ Since God is better than anything that can be conceived, we can reject our body as being God. We can reject the senses as being God too. The common sense, fantasy, imagination, and even the reason cannot be God, 'for it [reason] often fails, and does not attain to all things . . . the power of reason therefore is small . . .'. Each of these has its limitations. Even our intellects are limited:

But if you seek further, you find nothing in yourself like God, but rather you affirm that God is above all these as the cause, beginning, and light of life of your intellective soul. You will rejoice to have found God beyond all your interiority as the source of the good, from which everything that you have flows out to you.³²

Not only is God beyond all these, but also God is necessarily beyond these *as the cause of them*. As the Creator of all things, God is necessarily beyond our interiority, not because He is our True Self (beyond our little egos), but because apart from being the Creator and what flows from that He cannot be anything to do with our interiority as such at all.

Clearly, the Christian prototype for Nicholas's ascent here, as so much else in Nicholas's treatment of these issues – even down to the Platonic elements – must be Augustine (e.g., *Confessions* 3: 6.11; 7:17.23; 10:6.9 ff). It is indeed true that, as with Augustine, in discovering God we also discover our true selves, but only (or mainly) inasmuch as in discovering God we discover that we are not 'sufficient unto ourselves' but rather we are all creations. *That* is our true nature, our true self. We discover that without God we were not really being and living where truly we actually were and are. Since the Creator is what God is, God has to be beyond all created things.

As the Creator of each and every thing, God is also present to us in the mode of creator. We can *know* of each and any thing *that* it is created by God, and respond appropriately (pre-eminently in gratitude). Thus God as Creator is always present to us as well, in that mode as creator. But for the Christian there is more, and that more is also uncovered by Nicholas of Cusa. For:

[W]e are drawn to the unknown God by the movement of the light of the grace of one who can be known only by self-disclosure. And God wills to be sought and wills to give to seekers the light without which they are unable to seek God.³³

We should be clear that it is God Himself who initiates all moves in us to seek Him, and it is God Himself who knows that the terminating point of our seeking is Himself revealed precisely as unknown to us. For Nicholas, as of course for the Augustinian tradition he represents, without the grace of God we neither know God nor do we know how not to know God. But with God's grace we can come to see God as One Veiled – and hence as One Absent – save as Creator implied by existence, and in His own self-revelation in scripture and in Christ. We can go as far as realising, and realising deeply, the darkness of God, the Creator, the absence of God Himself to our intellects – the hiddenness of God within a cloud of unknowing – but this in itself should direct us outwards to Christ and the Scriptures, where we can actually meet God Himself.

As both Nicholas of Cusa and Gregory Palamas equally realised, the *via negativa* is only half the story, and needs to be complemented by the positive theology of Christ, which always has the capacity (in its many different ways) to render the hidden God truly present for us. This is brought out by Nicholas wonderfully in a passage at the beginning of his *De visione dei* ('On the Vision of God'), making very obvious the interplay between the apophatic dwelling in the presence of God in 'wise ignorance' and the actual positive knowledge of God – a foretaste of our eternal happiness – that can be gained through Christ and the Scriptures:

I will attempt to lead you experientially into the most sacred darkness. While you abide there, feeling the presence of the inaccessible light, each of you, in the measure granted him by God, will of himself endeavor to draw continuously nearer and in this place to foretaste, by a most delicious sampling, that feast of eternal happiness to which we have been called, in the Word of Life through the Gospel of the ever blessed Christ.³⁴

God *qua* absent, God quite beyond our consciousness, *comes to us* as Christ, and it is as God Himself that Christ is present with us (see *De doctrina ignorantia*, part 3). Thence it becomes possible not just to know something about God – that He is the Creator ('knowledge by description') – or even to feel the presence of God *qua* Creator, but to know God Himself ('knowledge by acquaintance'). In the terms of the world of the *KBRP* Christ is the guru, and given the nature of the Abrahamic God the only guru, who could be God-as-present for us.

Put another way, for the *KBRP* God (as it were, Samantabhadra) is always present, yet may be unrecognised. The mind has to be led, taught, to make that turn which realises the presence of God in all experience as the very nature of the consciousness that is experience, or (and) the light in which it occurs. For the classical theist, on the other hand, God is always present yet absent – present in the mode of Creator to creation and yet – as Creator and therefore the reason why there is something rather than nothing – essentially other than creation and therefore absent as well.

This is, of course, the old issue of immanence versus transcendence. For the classical theist God is always present yet absent, ever suggested, ever available, ever responsive to our awareness of radical contingency and hence our gratitude, and yet by His very nature literally *not here*, and in that respect absent. Or almost always. For there is one exception to this portrayal of the presence yet absence of God, an exception that shows that this cannot be an *essential* aspect of God. For in Christ we find God present in creation in a much more direct and literal sense than the presence whereby a Creator is present to his creation. In Christ God is present yet present, although of course as with the *KBRP* that may go unrecognised.

I have urged that for the theist, drawing on the *KBRP* while at the same time departing from it, God is present to us constantly in our *gratitude*, the gratitude that comes from our consciousness, and consciousness that must be a consciousness of *being*. Or the gratitude that comes from seeing all things quite literally in the ‘uncreated light’ of God. That consciousness, or that light, is present whether our eyes are open or closed, seeing or not. It is there whether we are awake or asleep. It is dormant only in our unconsciousness. And it is vividly, inexpressibly, present – oh, how present! – in our death. This gratitude is coterminous with consciousness, with the light in which consciousness radiates. Of course, we can lose it. We can lose our awareness of the light, and we can lose the gratitude that is its response. But that loss is *our* loss, *our* darkness, springing from our *obscurations*. It is not a loss of the light, a loss of consciousness and hence a loss of (for us) being. The light needs to be pointed out again – we need a guru. Hence the loss, inasmuch as it endures, is also the loss of our guru.

For a Christian this must be the loss not of God as such but of Christ. For it is Christ as God-with-us who points out to us the nature of God and hence the loving gratitude that is our response to being as not being-in-itself but as *created*. Thence what we experience as the hiddenness and unknowability of God becomes a variant on the hiddenness of the guru. This now would be the hiddenness of Christ – the Christ who is ‘with [us] always, to the end of the age’ (Matt. 28:20), the Christ who (like Samantabhadra, and indeed in a way like God Himself) cannot be hidden

for those who have faith since, as St Paul puts it, 'I have been crucified with Christ; and it is no longer I who live, but it is Christ who lives in me' (Gal. 2:19–20). Hence there is also another way in Christianity where Christ cannot be lost for anyone who still lives in faith. That is through the sacraments, overwhelmingly in the sacrament of the Eucharist, the Holy Mass. The presence of Christ, the guru, thus becomes in part the eternal presence of the Mass, to use a Buddhist concept, the definitive 'act of guru-devotion'.

Let me now summarise what I want to say about the hiddenness of God, drawing on a Buddhist perspective. It is arguable that Buddhism presents an unpromising basis for considering God's apparent withdrawal, except in some analogous or perhaps metaphorical sense. Yet drawing on the *Kun byed rgyal po* and playing with its concepts within theistic discourse I urge the following:

- 1 God cannot be hidden, for God is the very condition of our experience. Because God is always present there is nowhere we can go to hide from God, and nowhere God can go to hide from us.
- 2 Yet we can fail to be attuned to God's presence riven into the very fabric of our experience; we can fail to be aware of God's presence. And because we can fail to be aware of God's presence riven into the very conditions of our experience itself, it becomes meaningful to seek to remove those aspects of our past and present lives that block us from living in the presence of God.
- 3 We may need and seek help to see the presence of God-with-us; hence we may embark on the quest for the guru. And the guru can help because he is one who lives for ever in that awareness of the presence of God.
- 4 When we go beyond the Buddhist *Kun byed rgyal po* to an explicitly theistic context we see that the way God is present with us, riven into the very conditions of our experience, is as *Creator*. Because God is present to us as Creator, the imperative of our response is one of gratitude. 'Father, it is our duty and our salvation, always and everywhere to give you thanks', as the second Eucharistic Prayer in the Roman Catholic Mass has it.

- 5 But while the Creator of there being something rather than nothing is always present immanent in His causal setting, He must also infinitely transcend it too, since that which answers the question ‘Why is there something rather than nothing?’ can never be contained, or spatially located (or subject indeed to any other limitations). Thus the God who is always present is also necessarily always utterly absent to us too.
- 6 There is a sense in which God, therefore, is surely necessarily, and hence always, absent to us – hidden from us. But when we look at it more closely we see that this cannot be *necessarily* the case, at least not in all senses. The guru is the one in whom God-with-us and God-absent-to-us are one. How do we bring God as hidden into communion with God as always present to us, riven into our very experience itself? The guru in such a context can only be the one who not only lives constantly in the awareness of the presence of God but also can make the utterly absent present for us. But such, for a Christian, has to be Christ Himself: ‘[A]nd they shall name him “Emmanuel”, which means “God is with us”’ (Matt. 1:23). And Christ comes to us – we cannot find Him ourselves. In the words of the *Kun byed rgyal po*, we relax into His presence and in that we are self-liberated.

Notes

- 1 See *Summa Theologiae*, 61 vols (London: Eyre and Spottiswood; New York: McGraw Hill, 1964–80), 1a. 2. 3: *et hoc dicimus Deum*. This question, ‘Why is there something rather than nothing?’, is admittedly perhaps ambiguous. If I ask why something occurs, I could be asking what brought it about: ‘Why did Archibald fall to the ground?’; ‘He had a heart-attack’. Or I could be asking what the motives were of the person behind it: ‘Why did Archibald fall to the ground?’; ‘He is learning judo and wanted to show us how to fall without injury’. In the case we are concerned with here, Aquinas’s arguments for the existence of God in *Summa Theologiae* 1a. 2, 3, God is the answer to the question about why there are things, rather than no things at all. God – the creative

activity of God – is the final efficient cause of there being something rather than nothing: God is that without which there would be nothing: ‘Why is there something rather than nothing?’; ‘God [creates]’. This is a case of the first sense of ‘Why?’ above. It is an answer to a question about *things*. It is not a question about why it was that God created. It is not a question about God Himself – his *motives* in creating. It should not be confused here with the question ‘What were God’s *reasons* for creating things?’ (the second sense of ‘Why?’ above). In this reading of Aquinas and the existence of God I have been greatly influenced by the work of Herbert McCabe (e.g., his *God Matters* [London and New York: Mowbray, 1987], p. 5).

- 2 This is not the same as answering Aquinas’s question ‘Why is there something rather than nothing?’, however. I have treated this in Paul Williams, ‘Aquinas Meets the Buddhists: Prolegomenon to an Authentically Thomas-ist Basis for Dialogue’, in Jim Fodor and Frederick Christian Bauerschmidt, eds, *Aquinas in Dialogue* (Maldon, MA, Oxford, Carlton, Victoria: Blackwell Publishing, 2004), pp. 87–117.
- 3 Paul Williams, *Mahāyāna Buddhism: The Doctrinal Foundations* (London and New York: Routledge, 1989), ch. 5.
- 4 Gregory Palamas, *The Triads*, ed. and introd. John Meyendorff, tr. Nicholas Gendle (Mahwah, NJ: Paulist Press, 1983), p. 93.
- 5 *Byang chub kyi sems* (Sanskrit: *bodhicitta*) is often translated as the ‘mind of enlightenment’, or the ‘awakening mind’. But in this Tibetan context it should very definitely be translated with the sense of something (innately) possessed rather than something to be attained. Thus it is the primordially, innately, ‘awakened mind’.
- 6 Samten Karmay, *The Great Perfection: A Philosophical and Meditative Teaching of Tibetan Buddhism* (Leiden, New York, Copenhagen and Cologne: E. J. Brill, 1988), p. 207.
- 7 Tibetan: *byang chub sems*; Sanskrit: *bodhicitta*, as noted above here the awakened mind, enlightened awareness, not be confused with its wider usage in Mahāyāna for the aspiration and associated practices of the bodhisattva, one on the path to Full Buddhahood.
- 8 Unless noted otherwise, all translations from the KBJP are taken for convenience from Chögyal Namkhai Norbu and Adriano Clemente, *The Supreme Source: The Kunjed Gyalpo, The Fundamental Tantra of Dzogchen Semde*, translated from the Italian by Andrew Lukianowicz (Ithaca, NY: Snow Lion Publications, 1999). I have checked it carefully against the Tibetan. I have added the material in square brackets in the translation. Sanskrit equivalents may be more familiar

- to most readers and are reconstructed from the Tibetan. The Tibetan text here (see *Kun byed rgyal po*, in *Chos thams cad rdzogs pa chen po Byang chub kyi sems Kun byed rgyal po*, *The Tibetan Tripitaka*; Taipei edn, ed. A. W. Barber, vol. 54: rNying ma rGyud 'bum, 1/2-38/262 (Taipei: SMC Publishing Inc) is pp. 10–12.
- 9 Or, perhaps more literally, 'I will be something fabricated (*bcos pa*)', hence not truly the unconditioned state and thus not truly the ultimate absolute reality.
 - 10 Norbu and Clemente, *The Supreme Source*, pp. 186–7; text p. 146. Material in round brackets added by translators.
 - 11 See *ibid.*, p. 190; text pp. 163ff, e.g. p. 164: 'Listen, great being! This is the meaning of "there is no view on which to meditate." As the root of existence does not lie outside oneself, it is not possible for a subject to take itself as an object; consequently, there cannot be an object that is not oneself. Thus there is no view on which to meditate.'
 - 12 *Ibid.*, pp. 195, 211, 220; text pp. 174, 216, 232. Material in round brackets in the translation added by translators.
 - 13 For a recent collection on the theme of light, as a term for the ultimate and also its occurrence in religious experience, in a number of religious traditions including Eastern Orthodoxy and various Buddhist traditions related conceptually to KBRP see Matthew T. Kapstein, ed., *The Presence of Light: Divine Radiance and Religious Experience* (Chicago and London: University of Chicago Press, 2004).
 - 14 Text pp. 111–12: This is my own translation. Compare with Norbu and Clemente, *The Supreme Source*, pp. 172–3.
 - 15 One is reminded here of the words of Psalm 36:9 'in your light we see light'. All biblical quotations are from the *New Revised Standard Version* (Anglicized edition, Oxford: Oxford University Press, 1995). To see light is a phrase that, in the Hebrew Bible, may mean to 'to live' (Raymond E. Brown *et al.*, eds, *New Jerome Bible Commentary*, Study Edition [2nd edn; London and New York: Geoffrey Chapman, 1995], p. 532). Thus, at least in this usage, there is a suggestion here that to live is to be in the light of God.
 - 16 Norbu and Clemente, *The Supreme Source*, p. 210; text p. 215.
 - 17 *Ibid.*, p. 162; text pp. 93–4.
 - 18 *Ibid.*, p. 230; text p. 257.
 - 19 Williams, *Mahāyāna Buddhism*, p. 27 and ch. 10.
 - 20 Norbu and Clemente, *The Supreme Source*, pp. 163–5; text pp. 96–8.
 - 21 *Ibid.*, p. 152; text p. 64. Material in round brackets added by the translators.
 - 22 *Ibid.*, p. 184; text p. 141.

- 23 Ibid., p. 190; text p. 164.
- 24 Ibid., pp. 199–200; text p. 188.
- 25 Of course, one could argue that Namkhai Norbu has a rather narrow idea of what is involved in theism. Perhaps what he says here about Samantabhadra is compatible with theistic ideas of God, a God who certainly cannot be in any normal sense ‘an individual being’, and could in a sense be spoken of teleologically as ‘our potentiality’? I think the differences are more acute, however. Clearly the reason why Namkhai Norbu thinks Samantabhadra cannot be God is because Samantabhadra simply is – as a rhetorical personification – the *tathāgatagarbha*, our own Buddha nature. As such, that is a dimension of ourselves, the nature of our own enlightened consciousness. What is said of Samantabhadra is said to be so because that is how things are, in dependence upon the (nondual), absolute reality of Mind (referred to in Sanskrit using mentalistic terms like *citta*, *cittatā*, *viññāna*, *jñāna*, and so on). Samantabhadra is at its most refined level and to the supreme degree our own consciousness. *That*, for classical theism, must be a creation. Thus Samantabhadra cannot be God in any sense understandable to someone like Aquinas. Namkhai Norbu is right.
- 26 Nicholas de Cusa, *De docta ignorantia*, in *Selected Spiritual Writings*, trans. and introd. H. Lawrence Bond (Mahwah, NJ: Paulist Press, 1997), pp. 126–7.
- 27 Ibid., p. 218; cf. the Latin in Niccolò Cusano, *Il Dio Nascosto* (Milan, Biblioteca Universale Rizzoli, 2002), p. 68.
- 28 Ibid., p. 220.
- 29 Note the Platonic dimension of Nicholas’s ascent in all this. It is particularly marked in the reference to everything other than God as a shadow.
- 30 Nicholas de Cusa, *De docta ignorantia*, p. 225.
- 31 Est denique adhuc via intrate quaerendi deum, quae est ablationis terminatorum: Cusano, *Il Dio Nascosto*, p. 110.
- 32 Nicholas de Cusa, *De docta ignorantia*, p. 231.
- 33 Ibid., p. 226.
- 34 Ibid., p. 235; comma after ‘called’ added by the author.

Divine Absence and the Purification of Desire: A Hindu Saint's Experience of a God Who Keeps his Distance¹

Francis X. Clooney, SJ

I

In the following pages I offer a comparative reflection on a major theme of this volume: how are we to think about the absence of God, when we know both that God is loving and good, and that good people earnestly desire the presence of God?

While the theme is large, I work with a single extended example drawn from a single Hindu tradition and, within that tradition, a single eleven-verse song and (later in this chapter) the commentaries on it.² (I realised from the start that it would not be wise for me to read the song on its own; confusions or missteps can always mar the reading of a modern, Western scholar, particularly one who is not a Hindu.) I consider only song 7.1 in the *Tiruvaymoli* song cycle by Satakopan, the ninth-century devotional poet and Alvar ('immersed [in God]'), and this song as interpreted in the Srivaisnava Hindu religious tradition. This tradition grew up in south India at least as early as the tenth and eleventh centuries, drawing on Sanskrit and Tamil language sources to construct a theistic Vedanta (based on the Upanishads) devoted to the deity Narayana with his eternal consort Sri. The Alvars were twelve poet saints of the seventh–ninth centuries who composed intensely passionate devotional songs in the Tamil language of south India. *Tiruvaymoli* is primary among these works, a 1,100 verse masterpiece comprised of ninety-nine eleven-verse songs and one

thirteen-verse song. It is understood to be the privileged expression of all the dynamics of theology and spirituality for the Srivaishnava theological tradition, which finds here a key source for its theological and spiritual views.

Srivaishnavism is a particularly interesting example to the Christian theologian, since in the Indian Hindu theistic context, and particularly in the Srivaishnava tradition, the general problem of the absence of God, or separation from God, is worked out with regard to a number of features either at least recognisable to a Christian audience, even if not entirely shared:

1. Material reality is not absolutely evil, nor is it inherently opposed to spiritual values;
2. Indeed, there is such a thing as divine matter, God's own body;
3. Yet matter, as we happen to experience embodied existence, is still often portrayed as a snare that distracts and enslaves, and so as a barrier blocking direct encounter with God;
4. Beings living within material bodies are constricted by good and bad karma (deeds and their effects), and so experience an even greater distance from God;
5. God, though having a body, is not apprehensible to ordinary sense perception, and so cannot normally be seen by living beings while in their ordinary material bodies;
6. God is infinite and beyond word and mind, and so cannot be present as other beings might be present; in a way, God is ordinarily experienced as absent;
7. Although the absence of God is a very widely experienced phenomenon, some persons are not content with it; even if seeing God is a primary goal of life that cannot be achieved while alive, such individuals seek direct vision, and inevitably suffer divine absence;
8. But throughout this search and suffering, God is in fact gracious, resolute in his³ determination to be near the devotee;
9. It is divine absence – after and before divine presence – that humans most compellingly feel and put into writing;
10. God's absence and presence, withdrawal and arrival, are often

presented dramatically; love for God at least appears subject to the same fluctuations, proximities and absences, as human loves, when lovers quarrel, part, reunite.

All these points will be the operative background with respect to *Tiruvaymoli* 7.1, even if its poetic form resists any single, particular theorisation.

II

There are a number of songs in *Tiruvaymoli* relevant to the themes of separation and absence. Some, in the voice of a young woman, dramatically portray her perplexity at her divine lover's absence, or her tortured separation from him. Song 5.9, for instance, vividly portrays her on one side of a river she cannot cross, while her Lord resides on the other; she laments her fate to the local women:

Good, doe-eyed women, this sinner is wasting away, day by day:
when will this servant reach the feet of the king who dwells in Tiruvallaval
amidst honeyed gardens where lovely kamuku trees fill the heavens
and honeyed mallikai trees send forth such fragrance?
The flowers in your hair are lovely, women, but tell me –
will I ever be able to look constantly upon the feet of the Lord
who has long dwelled in cool Tiruvallaval
where the smoke of oblations wafts aloft in every direction,
where the chanting of the good Veda resounds like the sea –
while my grief-stricken self is wearing away? (5.9.1, 3)⁴

Absence is imagined as geographical, and the Lord is remembered in vivid detail; he is near, but he cannot be reached, and in that sense has become unknowable.

Song 6.2, also in the voice of a young woman, recounts her argument with Lord Krishna, who is very near, but elusive – flirting, teasing, then pulling away. They are always close by to one another, yet in a relationship constantly liable to breakdown. She takes the initiative by chal-

lenging him to go away, as if his departure might actually end their quarrel:

I may be afraid to stand
 in front of those lightning-waisted women who wear your grace,
 O amazing one who burnt that king's fort in Lanka,
 but I know your game:
 so what have I to do with all this?
 give me back my ball and ankle bracelet – and go away.
 Go away sir –
 your lotus eyes and smiling radiant mouth cause us grief,
 and we suffer, as if it's our very destiny;
 those women – those great plumed peahens who wear your grace –
 let them hear your flute and rise up,
 leave your herd behind, play your flute over there, go away.
 Go away, sir – tell your lies to people who don't know you;
 your berry red lips and your eyes are contrary today – and
 who are those women with slender bamboo shoulders
 who gain such grace from the Lord who churned the great, broad
 sea? (6.2.1–3)

Intense, close-up, this is a quarrel of lovers deeply intimate with one another. Her rebuke prolongs their conversation, while Krishna's subsequent departure is a lover's strategy; she is indicating how much he means to her, while his game of hide-and-seek serves to annoy, arouse, and entirely captivate her even in the midst of her scolding words.

Song 6.5 describes a young woman who is confused and bereft because she does not know where her beloved has gone:

This girl of sweet nectar words has entered Tolaivillimangalam
 noisy with the great din of festivals,
 so have no hope for her now;
 transfigured, she stands speechless, crying, 'Lord, God of gods!'
 her mouth twisted about, her eyes welling tears,
 she bends, she breaks, she comes apart.⁵ (6.5.2)

Changed by him but then abandoned, she cannot live a normal life; her Lord has been very close to her, but he has also been inconstant and now is nowhere to be found.

Such songs are powerful and lovely, yet only indirectly do they pose theological issues. The Alvar, speaking in the woman's voice, transposes his complaint against God into the lyric language of an older Tamil genre of lovers and their longings in absence. In such songs he plays out the lovers' quarrel – as the divine he and human she, seek, argue, quarrel with one another, and move apart in moments of absence – during which their memory of quarrel keeps alive their presence for one another.

III

Song 7.1, by contrast, appears to us as a complaint spoken by the Alvar directly and in his own voice, and so the theological stakes are more urgent. Here too, we find a lament at separation from God; it is voiced in terms of vivid memories regarding what God has done and could still do, and yet does not do now, in his absence. It is a lament possible only for a believer who has already experienced God and who continues to remember and praise God's great deeds, even when God is keeping his distance, leaving the anxious, earnest devotee in the clutches of sense attractions that draw him in the opposite direction. Here is the song:

1. By the five senses dwelling within me
you afflict me and keep me from your lotus feet,
and now you mean to torture me further still –
O great one, praised by the immortals, your marvels beyond
reckoning,
owner of the three worlds, ambrosia, father, master ruling me.
2. They rule me like stern kings,
the five senses you've placed over me,
you make them push me away night and day
so I cannot come anywhere near you:

see, it's all your doing –
 O cane sugar, ambrosia, Lord dark as a rain cloud,
 holding the lightning wheel that guards the world surrounded by the
 sea,
 even to me with my karma
 you are the one known in the Veda.
 3. The five senses keep on burning me,
 you make them butt against me as I do my deeds – and
 all this is just to stop me from reaching your feet;
 but what do you gain from it? alas,
 O first one, you made this wide world,
 devoured it, emitted it again, crossed it, furrowed it,
 O Lord with the long flaming hair,
 I am your servant, O Madhusudana.
 4. You show me the five senses and then I understand nothing,
 you whirl me about so I do not reach your feet –
 see, it's all your doing –
 O baby playing on the bright banyan leaf,
 you kept everything hidden in your belly,
 no thing and no one excepted,
 you are the cure for the deeds I've done.
 5. Attacking me with the five senses which are beyond cure,
 you throw me into the oil press,
 you trap me front and side, you break me, you crush me,
 or so it seems,
 but who else could be my cure?
 O Lord, holding your war discus
 you uprooted the powerful clan of demons,
 roots, sides and all,
 O Lord of the heaven-dwellers!
 6. O Lord of the heaven-dwellers,
 here on earth these five senses torture even those who always serve
 you –
 then what if you abandon me?
 O Supreme Lord,

you are in my songs, you are in my poems, you are in my devotion,
you are in my eyes, you are in my heart, you are in my word –
so come on, speak, say something.

7. The five senses promise anything but stick with nothing,
they are so great –
so when can I ever conquer them, if your grace is not here?
O father, that day when the wave-tossed ocean tossed about both
gods and anti-gods,
you used a mountain for a churning stick and a serpent for its rope:
I am the maker of my karma, but I keep devouring you,
O sweet ambrosia.

8. The five senses are like sweet ambrosia,
or so you make it seem as you delude everyone,
root out your primal maya,
make me think only of your signs and sacred image,
make me give praise, as I join my hands in worship,
grant me this grace,
O mother, O Kannan, first in the clan of the immortals.

9. The pit of cruel karma devastates our clan to its very source –
and into it the five senses throw me;
to eradicate their strength,
look, you must give me your grace:
it was you who first created the many things that move or are still,
this earth and every other world, my Kannan, my highest light.

The Lord is absent, but he remains near enough that the troubled poet can reproach him for his absence. He is remembered, and that remembering of him is still powerful, since the Alvar can accuse him of deliberately causing a separation that might easily have been avoided. Thus, in the first lines of each verse, a clear accusation is made. What does the Alvar do in this situation? He speaks directly to his Lord, reminding him of his great generosity and care, implicitly rebuking him because he acts this way when he could act otherwise, as he has in the past. Each reproach turns into a reminder that this divine, absent interlocutor is by nature and past history perfectly capable of acting differently.

The Alvar is in anguish because he remembers not only that some divinity is absent, but also that this absent deity is an intensely involved, loving, close-up God who had been present but who for some good reason is choosing to keep the devotee at a distance, for a moment. Correct theological remembering thus provides the context for a more anguished and intense complaint that God is not living up to his reputation.

Although there will be a happy ending for the whole of *Tiruvaymoli*, there is no happy ending in 7.1, since our song remains unresolved even in its tenth verse:

10. 'Highest light!' I call out to you,
but just when I am ready to melt with love at your lotus feet,
you weigh me down again and lay upon me heavy burdens;
the five senses drag me this way and that, tormenting me –
you who once churned the ocean, ambrosia is your form.

A hint, perhaps: the primordial and mythic churning of the ocean was an arduous struggle to find in the vast ocean some hidden elixir of life, and endless churning finally brought to its surface the concealed ambrosia. An arduous journey down into the murky waters of divine absence might also eventually yield divine presence.

The eleventh signature verse, wherein the author is the topic, praises Satakopan and his song as able to verbalise and therefore conquer absence; it offers an implicit hope, but no specific clues as to precisely how anything will change:

11. His form one and three,
he creates, supports, destroys the rare three strands,⁶
our father with the lotus from his navel, he rests on the sea:
Satakopan, the servant of the servants of the servants
of that Lord,
sang a thousand verses,
and from those skilled in singing them, karma flees, night and day.

Another hint: night and day may indicate the times of absence and presence, both overcome by the potent force inscribed in the words themselves.

IV

7.1 must also be read in context, since it is but one of the one hundred songs that make up *Tiruvaymoli*. Here, in lieu of a more comprehensive contextual study, we can note the significance of its location after song 6.10. The intensity of 7.1 is all the greater because in context it upsets the expectation promoted by that previous song, since the Alvar remains at a distance from his Lord, although he had entirely surrendered to him in 6.10, where he had presumably become very close to him:

‘Even though I’ve done no penance in order to see your feet,
I cannot wait to see them,’
say the subtle blue-throated one, the perfect four-faced one and
Indra,
and with their women whose eyes sparkle, they take delight:
O Lord of holy Venkatam, O Mal, dark and entrancing,
come to me, your servant, as you came before.
You do not come as you came before, and as you did not come, now
you come;
eyes like red lotuses, lips like red fruit, four-shouldered one, ambrosia,
my life,
O Lord of holy Venkatam where glowing gems make night into day:
alas, this servant cannot be apart from your feet even a moment.
‘Even a moment I cannot stand apart,’
says the Lady on the flower who resides on your chest;
you are unmatched in fame, owner of the three worlds, ruler of me,
O Lord of holy Venkatam where peerless immortals and crowds of
sages delight:
with no place to enter, this servant has entered right beneath your
feet. (6.10.8–10)

Surrender entails deep trust and yields intimate union, and 6.10.10 would be a satisfactory conclusion to the whole of *Tiruvaymoli*. Yet 7.1 indicates that instead of consolation new anguish follows. So why then does this Lord – who offers refuge and with whom refuge is certain – choose to keep this most admirable saint at a distance, even after his wholehearted act of surrender? The optimism of 6.10 accentuates the despair of 7.1.

After 7.1, a change of scene prolongs the problematic of 7.1, leaving it unresolved. 7.2 reverts to the he–she scenario, wherein the young woman’s mother rebukes the absent Lord for his dire effect on her daughter:

Night and day, her eyes know nothing of sleep;
 with her hands she splashes tears about her, she cries,
 ‘Conch, discus!’ and clasping her hands,
 she cries, ‘Lotus-eyed one,’
 she grows faint, she asks, ‘How can I survive without you?’
 as she gropes the wide earth with her hands:
 Lord of Srirangam where red kayal fish dart through the waters –
 just what are you doing to her? (7.2.1)

In turn, 7.3 shifts to a mood of hopeful expectations:

Bearing his discus and swirling white conch,
 the lotus eyed Lord rides his eagle across my heart:
 you don’t see this, women, so how can I explain it to you?
 I am going to Tiruppereyil
 where he reigns, flood of bliss,
 where the Vedas sound, where the festivals sound,
 where the games of playful children resound. (7.3.1)

The meaning of divine absence – and even whether there is a meaning to it – is not clear. For Satakopan, the remedy seems to lie simply in juxtaposing the Lord’s cruel absence with memory of his renowned ability to visit and save those in trouble.

V

However valuable a simple reading of 7.1 itself may be, it is instructive, in view of the questions it raises about the absence and unknowability of God, to trace the later conversation around the song in the Srivaisnava tradition, as generations of teachers sought to take the Alvar's plight seriously while yet respecting their own established views about divine goodness and accessibility. Let us now listen in on their readings of 7.1.⁷

In brief, there are five (interrelated) reasons for divine absence that stand forth in their thinking:

First, Satakopan is immersed in material reality, his senses turned away from God, even as he realises the wrongness and unhappiness of this orientation;

Second, the Lord may be cruel, needlessly absenting himself from those who seek him;

Third, Satakopan is only assuming the posture of someone immersed in the senses so as to instruct ordinary people; ever the teacher, Satakopan is vividly reminding his audience that absence from God occurs when one trusts oneself rather than God;

Fourth, perhaps the Lord is simply marvellous and mysterious, and his ways cannot be understood by humans;

Fifth, absence is actually a divine strategy by which the Lord accentuates the Alvar's creative energies, that he might sing more of his beautiful songs.

Let us consider these in turn.

First, divine absence can be construed as due to human absorption in the senses and their objects. According to Tiru Kurukai Piran Pillan (twelfth century; the first commentator whose teaching comes down to us), the Alvar does not understand the Lord's long-term plan, and so decides that his trouble is due to the perennial problem of the senses and material attachments:

The Alvar sees that although he had turned his senses away from material objects and towards the Lord, those senses are by nature still inclined towards

objects; they have been inclined that way from beginningless time until now, and thus are contrary to experiencing the Lord, an obstacle to the desired union. Unsited to union with the Lord, they are to be avoided. The Alvar feels like a person who is drawn to objects simply because he sees them. He is exceedingly afraid, depressed because he cannot see the Lord, afflicted in his mind.

Tiru Kurukai Piran Pillan also thinks that the Lord's failure to respond to the saint is an inaction that verges on cruelty; we return to this point below.

Vatakku Tiruviti Pillai (thirteenth century), a student of the great teacher Nampillai, portrays the Alvar as engaged in rather detached philosophical reflection on the causes of attachment:

The Alvar meditates on what he himself is like, how the Lord is not at all derelict in his role as protector, how the Lord's very nature is to protect, how attaining the Lord's feet is grounds for protection – and yet too how he himself has no connection to any of that. He meditates too on the actions, body, and senses, etc., that are rooted in the three constituents – *sattva*, *rajas* and *tamas* – and the material nature that undergirds them, as well as the material principle, the ego, and then too everything made from them: sense objects, along with the ignorance, karma, tendencies, and appetites that depend on those objects.⁸

All of this can distract and bind the self. It is 'natural' for the Lord to be a compassionate protector, and it is 'natural' for a human being to seek God; but also, unfortunately, to be drawn along by the tendencies of matter and the formations of ego, desire, and action that arise from contact with matter. God's absence is both unnatural and yet, too, a predictable outcome that follows from human ways of behaving.

Vedanta Ramanuja, a late fourteenth-century commentator (and disciple of Vedanta Desika whose view we shall notice below), highlights the extremity of what Satakopan is hoping for:

The desired union is external; in form, they are actually to see one another and talk with one another, etc. But while the Alvar's senses remain inclined

toward material objects, the Lord is beyond the senses. Accordingly, they block external union.

Second, divine absence may be interpreted as due to divine cruelty. While this is not a view that any of the commentators takes as finally true, several do consider it seriously, at least for rhetorical purposes. Periyavaccan Pillai, another disciple of the teacher Nampillai, takes a different angle by proposing rather starkly the seeming cruelty of this prolonged and deliberate divine absence:

The Alvar feels that the Lord, in his eternal glory, along with the eternal beings, has bound him with the three material constituents, tormenting him, and laughing at him as he observes how the Alvar is bound by the senses. The Alvar responds, ‘Do you who are most merciful and our protector afflict me thus – just watching me?’ This cry is hard to bear for whoever hears it.

But Periyavaccan Pillai still seems to assign at least part of the blame to the Alvar:

He suffers due to his own karma, but still the Alvar says, ‘He is afflicting me.’ His logic is that if gain is due to the Lord, there is no reason not to blame him for loss too.

Certainly, his personal lament suggests that he feels that his quandary is of his own making, and perhaps this is at least a psychological state of sin: God is absent, and it is my fault. The commentators are in general unwilling to blame Satakopan for the divine withdrawal, and in this regard Periyavaccan Pillai’s comment is extraordinarily explicit. Yet his instinct, and that of the tradition, agree in that neither human nor divine responsibility is allowed entirely to explain the situation of divine absence.

Above, we saw Tiru Kurukai Piran Pillan’s basic interpretation, that the Alvar is (or seems to be) distracted by his five senses and the attraction

of material pleasures, and so turns away from God. Yet he too notices a kind of cruelty:

The Alvar looks to the Lord – who rejects him and does not end his proximity to the senses. So he grasps the Lord's sacred feet and cries out, 'You put forward the senses, and you have hurt me; you have arranged it that I do not come near your feet. But what do you gain from all this? O most compassionate one! Draw me away from the senses and toward your feet!'

There is no response and so, because he cannot reach the Lord, he thinks embodiment is the problem:

He is depressed with a depression born of seeing how his material nature is contrary to union with the Lord. And so he cries out, like Sita imprisoned in the Asoka Grove.

In the great epic of India known as the *Ramayana*, Sita, wife and companion of prince Rama, is kidnapped and imprisoned in a grove of asoka trees in Sri Lanka. By tradition, the most painful part of that imprisonment is her forced separation from Rama.

Vatakku Tiruviti Pillai suggests that even if the Alvar understands why God might seem distant to someone infatuated with sense pleasures, one can still be shocked at what seems to be divine cruelty:

The Alvar realises, 'He made this miserable world, the senses and their objects, and intentionally put us in the middle of them. Thus we are in the middle of these things. As it says, 'These haters, cruel, the worst of men and unholy, I hurl continually into the cycles of birth and death, into none other than demoniacal wombs.' [*Bhagavad Gita* 16.9] The fact that his people in heaven can now watch us must be the reason he banished us; that noise in heaven is their laughter at our suffering. This situation is his glorious occasion play – and it is our prison.' He decides that the Lord – 'who graciously gives the good that removes confusion from the mind' [*Tiruvaymoli* 1.1.1] – has done this to make him suffer

like those not receiving his grace. So the Alvar puts his head at the Lord's feet, and lies there, crying out in such a way that whoever hears, melts.
(7.1)

In his *Dramidopanisd Ratnavali* the great teacher Vedanta Desika (fourteenth century) suggests that Satakopan is praising the Lord in a different way in each verse, all for the sake of accentuating the charge of cruelty:

'He is connected with countless marvels, utterly sweet, cause of the world, fittingly resting upon the banyan leaf, Lord of the thirty [heaven-dwelling gods], found within word and mind, the touch of nectar and the like, Lord of all, protector of the world, killer of demons, threefold in form – so now let him wonder whether he himself is cruel!' Thus sings Satakopan, as he sits under the tamarind tree.

Or, more schematically:

'He is connected with countless marvels,	[echoing verse 1]
utterly sweet,	[2]
cause of the world,	[3]
fittingly resting upon the banyan leaf,	[4]
Lord of the thirty [heaven-dwelling gods],	[5]
found within word and mind,	[6]
the touch of nectar and the like,	[7]
Lord of all,	[8]
protector of the world,	[9]
killer of demons threefold in form —	[11] ⁹

[All this is to accentuate the Lord's perplexity about his own identity:]
so now let him wonder whether he himself is cruel!'

Softening the charge of divine cruelty, Desika's disciple, Vedanta Ramanuja, highlights two key features of the Lord's identity that are manifest in 6.10 and 7.1: his innate determination to save, and his identity as the means to salvation:

Accordingly, at the beginning of this song, the Alvar says that everything undesirable must be ended; the verses show that the Lord is disposed to destroy all that is undesirable, and so the Lord is the means [to the Alvar's union with him].

Divine absence and neglect are only apparent:

In the previous song the Alvar took refuge at the Lord's feet; here he shows the Lord's disposition to end, for those taking refuge, all that is undesirable. The Lord is thus well disposed toward the Alvar, and is not really delaying the end of what is undesirable to him.

Vedanta Ramanuja concludes his introduction with a verse from Desika's *Dramida Upanisad Sara*:

The Alvar surrendered in a special way [at the end of song 6.10],
but there was no effect, so his heart is depressed and agitated
during these next one hundred verses [7.1–7.10],
so he makes very clear everything that is undesirable
and right up front confronts the Lord
who by nature is already favorable toward the Alvar
and already inclined to finish off the undesirable.

Vedanta Desika and Vedanta Ramanuja are attuned to the dynamic of the song itself – its sharp juxtaposition of the Alvar's misery with his memory of the Lord's well-known goodness; the juxtaposition of misery and memory takes form in a lament, directed to the one who is both the cause of suffering and its only cure. They manage also to see how the situation looks from the Lord's side: turning to complain to the absent, unapproachable Lord, the Alvar sees Lord already looking at him.

Third, even if divine absence is due to human absorption in the senses, Satakopan, who is in fact detached and free, takes on the persona of a trapped person in order to instruct others on the severity of the situation and proper response. Nanjiyar, a student of Tiru Kurukai Piran Pillan, asks whether the Alvar suffers for his own purification or simply to edify

and instruct others. Certainly, his suffering at the absence of God is clearly for the edification of others:

Although he himself has conquered his senses, he sees how others are bound to nature. They suffer greatly from the senses, opposed as they are to the experience of the Lord because they are inclined toward other objects and so are unworthy of the Lord.

Yet still, Nanjiyar admits, Satakopan need not be thought of as entirely impassive with respect to the experiences he so vividly expresses:

Even the Alvar himself suffers affliction of this sort on account of the senses, simply because he too is connected with material nature.

As a remedy – that also edifies others – Satakopan confesses his faith:

In order to get rid of this suffering, he affirms that the Lord is the protector of all who are accustomed to entrust to him the three material constituents [*sattva*, *rajas* and *tamas*], the senses, and their objects. He makes it clear that the Lord's power suffices for this protection, and that the Lord is surely engaged in actually protecting people: 'He and the flawless immortals seek to free those whose senses are bound so firmly by the three material constituents that they cannot be freed.'

In his *Srivacana Bhusanam*, Pillai Lokacarya (early fourteenth century) explores the dynamics of human fault while ruling out divine cruelty, and tries to make sense of the situation; he provides a vividly imaginative reading of the experience of divine absence in 7.1.¹⁰ In his view, there is a basic rule that accounts for divine absence, a rule which Satakopan rather dramatically exemplifies: whenever one looks to oneself for well-being, fear is aroused; looking to God, however, always ends fear:

Meditating on his own faults causes fear; meditating on the Lord's qualities causes the ending of fear. Confusing fear and lack of fear [by connecting

fear with the Lord and its lack with oneself] would eventuate in ignorance.
(nn. 366–7)

But still, if proper meditation is the key, how can the Lord be blamed for absence and loss? The question is emphasised by citing 7.1 with a similar verse from the *Periya Tirumoli* of Tirumankai Alvar:

But what then is the reason for verses such as ‘You mean to torture me further . . .’ (*Tiruvaymoli* 7.1.1) and ‘I am like a tree growing on the river bank, I am afraid . . .’ (*Periya Tirumoli* 11.8.1)? Such verses are simply meditations on our relationship with the Lord. (nn. 368–9)

He offers a simple analogy to explain why one might be inclined to strike out at the blameless Lord:

Just as a child stumbling in the road hits at its mother’s back, in the same way the Alvares scold their powerful yet detached relative, the Lord, when he does not prevent their stumbling.

But even if the protector does not act as the needy person expects, that protector is reliable in what really matters:

Were a mother not to pull back her child from the rim of the well, she is rightly blamed, and people say, ‘She pushed it in!’ (nn. 370–1)

Theologically, the Lord assents to separation, but is not to blame for it:

Just as the individual’s assent does not cause liberation, the Lord’s assent does not cause a lack of liberation. Such assents are proper to each. For loss, karma is the root; for gain, mercy.¹¹ (nn. 372–4)

According to Pillai Lokacarya, both the experience of the Lord’s absence and a counterproductive attraction to matter are not the Lord’s responsibility. Yet, in the divine plan, such painful experiences are still for the good. Pillai Lokacarya is advising us to think on both levels – theologically, 7.1

does not have a sound basis on which actually to blame God; but psychologically, it is to be expected that the religious person should chastise the Lord this way. In theory, God is never absent; in practice, it is the acutely religious person, not the one little interested in God, who in fact feels divine absence acutely.

Fourth, divine absence is but one more dimension of the divine mystery, God's imponderable activity in the world. Pillai Lokacarya's brother, Alakiya Perumal Nayanar, wrote the *Acarya Hridayam*, a dense summation and organisation of the theological meanings found in *Tiruvaymoli*. Alakiya Perumal Nayanar summarises Satakopan's overall accusation in 7.1 with an emphasis on the mystery of divine action, which is amazing and beyond human understanding:

‘By your countless qualities
you performed many marvellous yogic acts,
you have caused many pains;
by the yoga of your amazing power
you have cleared the path to bliss
for those who gain imperishable clarity,
you have graciously made them reach
the heavenly Vaikunta that is so hard to reach;
your omnipotence makes everything exist
– the moving and unmoving, starting with the wide grasses and tiny
ants –
but also, that I might not reach your feet,
you have placed me amidst these senses and you detain me there,
torturing me – O father!’
Thus the Alvar cries out loudly in diverse ways, rebuking the lord.
(*Acarya Hridayam* 225, part)

We have here yet another theological interpretation: divine absence and presence, the burden and attraction of matter – all of this manifests the marvellous and mysterious yoga of the Lord hinted at in 7.1.1: what appears cruel is mysterious, and may, in the end, be magically transformed into

kindness and benefit. Absence is a kind of divine presence: there is never a vacuum, no static or even metaphysically necessary absence of the omnipotent and omnipresent God who is always planning something.

Fifth, absence serves to provoke Satakopan's artistry, and to bring to fruition the beauty and power of *Tiruvaymoli* itself. On the one hand, and setting the direction that is dominant in the overall commentarial reading of *Tiruvaymoli* as a whole, Tiru Kurukai Piran Pillan emphasises the *divine* need that the Alvar bear this most difficult and most productive experience of divine absence. The Lord wants more of the Alvar's lovely poetry; since Satakopan's composing is in part driven by divine absence, the Lord decides to keep the Alvar in his body, at a distance, and still singing:

Because the Lord is greedy for the Alvar's body and wants to complete *Tiruvaymoli* through the Alvar, he refuses to permit the Alvar to put aside his body.

The Lord enjoys the Alvar's voice and wants to hear the remainder of *Tiruvaymoli*, which would not be composed were the Alvar to leave this world and reach perfect union too quickly. Loathe to release the Alvar from bodily existence, he buys more time, postponing the Alvar's inevitable union, and instigating poetic creativity.

Nanjiyar indicates that divine absence is part of the larger dynamic of the divine-human relationship. As the Alvar vividly imagines the problem and expresses his difficulty in various ways, he is also simultaneously furthering the divine plan. Nanjiyar finds resolution in the eighth set of songs (8.1–8.10). The Lord, who likewise has been suffering, determines to (re)unite with the Alvar:

The Lord is deeply distressed when he hears the sound of the Alvar's lament, and to end this affliction he undertakes graciously to come and unite with him. . . . But he does not come directly to the Alvar or directly into him. Rather, in order that he might grow accustomed to the joy now rising within him, the Lord first enters the Tirukattittanam temple, as a prelude to uniting with him. When the Alvar sees how the Lord will soon be intimately united with him, he rejoices. (8.6)

He can no longer bear the Alvar's grief, so separation gradually comes to an end, and the Alvar's proper understanding of the divine character is restored:

The Lord himself has brought to an end all that has blocked the Alvar's way to reaching himself. He is exceedingly affectionate, not noticing even for an instant the Alvar's sins. The Alvar meditates on how the Lord has from time without beginning exerted many efforts to gain him, how he has kept desiring to attain him, and how the Lord acts as if he is gaining some unattainable acquisition. (8.7)

Divine absence is a divine choice, and it also ends by divine choice, when the divine person can no longer endure the postponement. Absence becomes a moment with a larger drama of union and reunion.

In his *Tiruvaymoli Nurrantati*, Manavala Mamunikal (fourteenth century) offers another slant on the issue of divine motivation. He rather cryptically highlights the power of the very words of 7.1 – blame inscribed in praise, blame rebuking the praiseworthy – as these words themselves, like an uttered mantra, end the dark night it so powerfully articulates:

‘That inestimable amazing one
placed me in this world with the five senses
in order to afflict me.’
When the Maran deserving of sweet praise complains this way,
the night of sin dissipates.

Pillai Lokamjijar, Manavala Mamunikal's disciple, confirms this point: ‘By the mere recitation of the song, the pitch black night of this world (*samsāra*) is destroyed.’ Once divine absence is articulated as the absence of *the Lord* this affirmation/complaint ends that absence. Like a mantra, this song is a potent recitation of God's holy names, a magic compound of praise and blame.

Throughout the Srivaisnava tradition, *Tiruvaymoli* 7.1 thus marks that moment in the ongoing divine–human relationship when intimacy is most acutely felt during inexplicable separation. The song is most poignant,

theologically and spiritually, for those who know something of God: ‘You don’t come as you came before, as you didn’t come, you come.’ (6.10.10) God’s ‘absence’ is not quite the right term for the problem, since the absent God remains palpably present; or, even if God is absent, everyone knows that this God can and will return. Because God is remembered and expected, absence is both painful and instructive. God chooses to postpone union, and accordingly maintains distance between himself and the Alvar; he employs ‘attachment to the senses’ as a useful pretext for the separation. But, as we have seen, absence provokes poetic composition, and it is the poetry that delights the Lord; by prolonging separation, he buys the time needed for the completion of *Tiruvaymoli*.

It is clear that the powerful verses of 7.1 provoke the commentators to find ways of making sense of the verse that are faithful to both the song and their larger theology of Narayana, the ever compassionate and loving deity. According to the Srivaisnava tradition, other, mythic, explanations of divine withdrawal and absence succeed only partially, eventually falling short; ruled out, too, are moral explanations that merely blame humans for God’s absence, and so, too, are philosophies that deny the idea of a God who might come and go. Even therapeutic ‘venting’ at divine absence ultimately gives way to a recognition, still felt with passion, that absence torments and is healed only because of a larger confidence that God’s promises always come true: absent for a time, he comes back.

VI

Throughout, I have tried to be attentive to the teaching of the Srivaisnava tradition – Satakopan’s song, and how it has been read by commentators – and as reticent as possible regarding what might be the meaning/s of this material for the Christian theological reader. Though I am always reading and writing as a Christian and with Christian starting points, my hope has been to provide a space in which the materials of the Srivaisnava tradition ‘speak for themselves’ without undo complication. This is the prerequisite for any Christian theological reflection that actually engages the Srivaisnava tradition in some way. In this final section I wish to offer a few broader

and then more explicitly Christian reflections on what I hope we have learned, though without branching off into more fully developed comparisons with Christian poetic, mystical, and theological traditions.

First, theological realism (that is, the view that beliefs about God and how God is present and absent should be presumed to be true most widely, not simply true-for-believers) demands of us that we assume a connection between a Hindu tradition's reflection on God and a contemporary Western Christian reflection on God. How Satakopan experienced God should at least be expected to shed light on how Christians read and interpret the experience of God present and absent.

Second, poetry is evidently a genre in which a religious person can more easily speak about God's (in)appropriate behaviour yet without thereby transgressing doctrinal and theological doctrines about what God is like. It is difficult for a Hindu or a Christian to declare that God is absent or cruel; yet by song or poem, the necessary points can be powerfully made. The Song of Songs and compositions of mystics such as John of the Cross or Gerald Manley Hopkins come to mind, and so too recent poets such as R. S. Thomas who has been introduced elsewhere in this volume. It may be that the very idea that God – perfect, present, utterly reliable – might suddenly be absent or unknowable is very hard for a believer to admit in appropriate theological prose. Poetry is that other voice in which such things about God can be said and heard.

Third, we can ask whether the God of the Bible does or could act as does Narayana in the Hindu Srivaishnava tradition. Can the God of Jews and Christians be absent in this way? It seems so. Consider, for instance, the complaint voiced in Chapter 64 of Isaiah, regarding how the people go astray because God has chosen to be absent:

You meet those who gladly do right,
those who remember you in your ways.
But you were angry, and we sinned;
because you hid yourself we transgressed.
We have all become like one who is unclean,
and all our righteous deeds [karma] is like a filthy cloth.
We all fade like a leaf, and our iniquities, like the wind, take us away.

There is no one who calls on your name, or attempts to take hold
 of you;
 for you have hidden your face from us,
 and have delivered us into the hand of our iniquity. (Isa. 64:5–7
 [NRSV])

Isaiah places blame in a way that Satakopan would recognise; it is God who creates the situation of separation: 'But you were angry, and we sinned; because you hid yourself we transgressed . . . for you have hidden your face from us, and have delivered us into the hand of our iniquity.' Anger, then sin; divine hiding, then iniquity. If we reflect on the preceding pages, it seems that almost at no point would we have to stop and say, 'No, the Christian God would never act that way,' or 'No Christian theologian could imagine divine absence in this way.' With respect to both the verses and the commentaries, similarities abound. Indeed, tutored by Satakopan, we can hear with fresh vulnerability the primal cry of abandonment in the Christian tradition:

From noon on, darkness came over the whole land until three in the afternoon. And about three o'clock Jesus cried with a loud voice, 'Eli, Eli, lema sabachthani?' that is, 'My God, my God, why have you forsaken me?' (Matt. 27: 45–6; NRSV)

In both the Srivaishnava and Christian traditions good and sensible thinkers strive to explain God's odd actions in a way that preserves divine perfection while yet not draining divine absence of its immediacy and pain.

Fourth, both the Srivaishnava and some Christian traditions, particularly in lineages such as that of my own Jesuit Order, decipher and signify divine absence in similar ways, for the sake of spiritual advancement. God's absence and presence are neither easily conceptualised nor easily responded to practically. A more subtle reading of the states of heart is required to map how God's action is to be discerned in human experience. This reading may, like poetry, 'flow' across religious boundaries and teach in a way that is not entirely constricted by the specific details of specific traditions.

That we have to learn how to read divine absences properly is a conclusion we can glean from reflecting on Satakopan's song read in light of Ignatius Loyola's instructions in his *Spiritual Exercises*. Here the traditions come near to one another by way of a kind of spiritual wisdom, as believers in both traditions learn to sort out the spiritual meaning of divine absences. For example, the first set of additional rules in the *Exercises* regarding discernment¹² are entitled 'Rules for perceiving and knowing in some manner the different movements which are caused in the soul – the good, to receive them, and the bad to reject them;' much of their substance, however, has to do with movements of the soul in relation to divine and demonic action. On the one hand, false consolation leads sinners into ever-deeper sins that are closely connected to sensual gratification:

In the case of those who go from one mortal sin to another, the enemy is ordinarily accustomed to propose apparent pleasures. He fills their imagination with sensual delights and gratifications, the more readily to keep them in their vices and increase the number of their sins. With such persons the good spirit uses a method which is the reverse of the above. Making use of this light of reason, he will rouse the sting of conscience and fill them with remorse. (n. 314)

On the other hand, however, those striving for perfection are often troubled by desolation:

In the case of those who go on earnestly striving to cleanse their souls from sin and who seek to rise in the service of God our Lord to greater perfection, the method pursued [by the evil one] is the opposite of that mentioned in the first rule. Then it is characteristic of the evil spirit to harass with anxiety, to afflict with sadness, to raise obstacles backed by fallacious reasonings that disturb the soul. Thus he seeks to prevent the soul from advancing. It is characteristic of the good spirit, however, to give courage and strength, consolations, tears, inspirations, and peace. This He does by making all easy, by removing all obstacles so that the soul goes forward in doing good. (n. 315)

Both passages might well be taken as characterising the experience of Satakopan, particularly in 7.1: desolation, the absence of God, can be a gift that gets us to reconsider how we live, by which priorities.

Ignatius defines 'consolation' and 'desolation,' in relation to turning towards or away from God:

I call it consolation when an interior movement is aroused in the soul, by which it is inflamed with love of its Creator and Lord, and as a consequence, can love no creature on the face of the earth for its own sake, but only in the Creator of them all . . . (n. 316)

Desolation is described in a way almost perfectly matched to 7.1 as an example:

I call desolation what is entirely the opposite of what is described in the [preceding] rule, as darkness of soul, turmoil of spirit, inclination to what is low and earthly, restlessness rising from many disturbances and temptations which lead to want of faith, want of hope, want of love. The soul is wholly slothful, tepid, sad, and separated, as it were, from its Creator and Lord. For just as consolation is the opposite of desolation, so the thoughts that spring from consolation are the opposite of those that spring from desolation. (n. 317)

How one reacts to this situation is the primary point of the instruction, and here, too, one might imagine Satakopan and his commentators making a discernment such as the following:

When one is in desolation, he should be mindful that God has left him to his natural powers to resist the different agitations and temptations of the enemy in order to try him. He can resist with the help of God, which always remains, though he may not clearly perceive it. For though God has taken from him the abundance of fervour and overflowing love and the intensity of His favours, nevertheless, he has sufficient grace for eternal salvation. (n. 320)

When Ignatius points toward an explanation of why these fluctuations occur, he can be read as it were in conversation with the Srivaisnava commentators who puzzled out the meaning of God's action in Satakopan's life:

The principal reasons why we suffer from desolation are three: The first is because we have been tepid and slothful or negligent in our exercises of piety, and so through our own fault spiritual consolation has been taken away from us. The second reason is because God wishes to try us, to see how much we are worth, and how much we will advance in His service and praise when left without the generous reward of consolations and signal favours. The third reason is because God wishes to give us a true knowledge and understanding of ourselves, so that we may have an intimate perception of the fact that it is not within our power to acquire and attain great devotion, intense love, tears, or any other spiritual consolation; but that all this is the gift and grace of God our Lord. God does not wish us to build on the property of another, to rise up in spirit in a certain pride and vainglory and attribute to ourselves the devotion and other effects of spiritual consolation. (n. 322)

All this deserves some careful consideration, as we diagnose the Alvar's suffering in the light of Ignatius's wisdom. It is an advance for all of us, I think, to be able to say, respectfully, that the Alvar composes 7.1 from the depths of a desolation that can be understood in terms of Ignatius's (second and third) reasons, even if we know of other reasons, such as God's desire to hear his saint sing *Tiruvaymoli*, a phenomenon not directly anticipated by Ignatius.

Fifth, it can follow that God's absence is not merely as a topic to be written about, as if putting experience into writing, writing-about, were merely a matter of neutral reporting. When a Christian studies a Hindu text – or a Hindu a Christian text – and then turns back to her or his own tradition for further study, the several texts studied individually and together produce a new situation.

On the one hand, comparative study may chill the customary ardour of our familiar ways of relating to God; much of what we thought to be

unique is not so, even at the more intimate levels of how we experience God's presence and absence. We learn to be more circumspect in relation to the grand certainties of our own tradition. Less is taken for granted, words and symbols lose something of their habitual efficacy, we achieve a distance from a familiar, but now more elusive God. Comparative work may make God seem still more absent.

On the other hand, by a kind of hide and seek we also rediscover God nearby in unexpected similarities, in a conversation with a distant tradition: Christ over there, right among the Srivaishnavas; the Alvar's God over there, right among the Jesuits. Divine absence drives one to look elsewhere, as if rebuking God for not being more evident right here, now. In the end, comparative words can end up making God seem more intensely present. In the end, comparative study exemplifies in its own way the marvellous yoga of a God we can hardly understand, faith's expectations and disappointments, human inventiveness in complaint and love, and the ways we suffer lives of knowing, losing, finding God over and over, in the words we write and in the cry that is 'hard to bear for whoever hears it'.

Notes

- 1 On the theme of this chapter, see also ch. 3, section 2 of my *Seeing through Texts: Doing Theology among the Srivaishnavas of South India* (Albany: State University of New York Press, 1996), 'Interpreting the divine silence: a brief theodicy'. All translations are mine.
- 2 While I believe that a narrow focus pays off in the long run, I can also admit from the start that this choice means that other interesting and important avenues of reflection must necessarily remained unexplored. In terms of traditions, for instance, both the Nondualist (Advaita) and Shaiva traditions offer views of the divine and its relationship to human experience and consciousness that would have to be worked out differently than with the Srivaishnava materials. In terms of genre, it is clear that myth, ritual, and technical (sastraic) philosophical discourse also open up rich vistas for consideration, where divine activity – and withdrawal – might be rationalised with great certainty, and the meanings of absence sorted out rather precisely.

- 3 Throughout, I follow Satakopan in using the male gender for God; since Satakopan also worships the Goddess Sri, he is capable of employing male and female reference as he sees fit.
- 4 On the dynamics of nearness and distance in this song, see my 'Nammalvar's Glorious Tiruvallaval: An Exploration in the Methods and Goals of Srivaisnava Commentary', *Journal of the American Oriental Society*, 111 (1991): 260–76.
- 5 See *Seeing through Texts*, pp. 1–9, for further comments on this song.
- 6 The *gunas* (*sattva*, *rajas*, *tamas*), of which all material things are made.
- 7 In the following pages, I draw very selectively on insights drawn from a wide variety of extant commentaries. None is available in English translation, and I have used available print editions of them.
- 8 The terminology here is rather technical, as if the Alvar is cataloguing his agony in proper philosophical terms.
- 9 Desika seems to omit reference to the tenth verse.
- 10 In his commentary on 7.1, the twentieth-century commentator P. B. Annangaracariar calls our attention to this *Srivacana Bhuvanana* text. Translations are mine, though I have consulted the translations by Robert Lester (Madras: The Kuppuswamy Sastri Research Institute, 1979) and B. S. S. Iyengar (Bangalore: B. R. Seshadri Iyengar, 2003).
- 11 The reference is to *Periya Tirumoli*, wherein Tirumankai Alvar expresses a sentiment similar to that of Satakopan: 'After all that, I still have more to say: Because you might make me appear again Through that opening whence people appear, Like a tree growing on the river bank I am afraid – O perfect one, fragrance, taste, touch, sound!' (*Periya Tirumoli* 11.8.1) Like Satakopan, Tirumankai Alvar writes contrast into his verse — there is distrust, fear of a return to this world — alongside a sense that his beautiful Lord is already all that he smells, tastes, touches, hears. While we cannot follow this parallel instance further here, nonetheless Pillai Lokacarya is valuably reminding us of the wider prevalence of the pattern enunciated in 7.1.
- 12 I have used the translation by Louis J. Puhl, SJ (Westminster, MD: The Newman Press, 1957), with his paragraph numbers, pp. 141–4.

Knowing the Unknowable

Rowan Williams

What we do not know appears initially in the form of pressure on the words and models we habitually use. Certain phenomena come into focus for which existing patterns of description or response do not appear to work: that is, these patterns no longer tell us how to react coherently to what is now perceived, they do not resolve theoretical questions arising, or they threaten to break down into self-contradiction.

The history of scientific research is marked by such moments of pressure: the collapse of phlogiston, the challenges posed by the analysis of electromagnetic force to simple mechanistic theories of causation, the disruption of anticipated patterns of light diffusion which prompted the postulation of black holes, and so on. A moment of tension arrives in which there is enough experimental certainty to confirm that there is a problem with what has hitherto worked well; what we have ‘known’ as a secure context for mapping out our environment gives way to what is ‘known’ initially simply as a disruptive but un-ignorable fresh cluster of data.

When the question is raised of whether scientific theory purports to be ‘realist’ in its claims, to be more than a pragmatic settlement, for the time being, of the most coherent set of ideas we can produce, one of the best answers is simply to point to these moments of unsought pressure. A settled, coherent account of what there is repeatedly gives way, because this settled account is not able to finish off and close off the flow of problems presented by the environment. The way in which a new question arises and

disturbs strongly suggests that we are not simply working for a rough consensus by which we make sense to each other, but that there is a real dimension of making sense of what presents itself. However hard we try to complete the process of mapping or description, there is something about our minds that is still vulnerable to the unplanned question, the unexpected way of seeing which pushes a step further. This is why any educational method that rests primarily on a binary model – specifying mutually exclusive alternatives within an agreed system – is going to be futile, if not dangerous. It is why – to be very specific – computers cannot replace human interaction in the teaching process; but that is probably another story.

Talking about the unknowable requires us to have some notion of this ‘vulnerability’ of the human mind; and this is perhaps why the whole area is uncomfortable to discuss in our current cultural atmosphere. The images that naturally come up are, as we have just seen, those of pressure and porosity: the mind is seen metaphorically as a soft substance whose boundaries are not secure from invasion. And this kind of imagery suggests that claims about knowledge have a dimension of risk to them – whereas normally to say that we know is supposed to exclude doubt.

In this connection, Nigel Tubbs, in his *Philosophy of the Teacher*,¹ discusses Gillian Rose’s account of different attitudes among medical specialists to her cancer – one doctor for whom the limits of knowledge are felt as a weakening thing, a defeat, and another for whom authority itself comes from recognising limits. ‘Dr Land, misrecognising vulnerability as weakness, feels she has to compensate for her “intrinsically limited knowledge”, and its threat to her status, by speaking in such “judicious” tones’. She is mastered by illness and consequently sees others as mastered by illness . . . Dr Grove, on the other hand, knows his authority to be mediated by his dependence upon conditions that he can neither choose nor control . . . [He] accepts that he is both servant and master in regard to medicine, and he recognises his vulnerability in this dual role as the defining characteristic of his relation to his patients . . . [and] is able to offer Rose the ambivalence of freedom and self-determination even within the limits, or the contingency, of her terminal illness.’²

This is a very suggestive analysis. The second doctor acts and speaks as if knowing were a matter of finding a way around in an obscured space

where you could not be sure what you would bump into. Authority is what you could call a 'navigational' matter; both the doctor and the patient start from a position of dependence on what they cannot control, and the task of the doctor is to guide the patient around a world in which the doctor, too, is limited and vulnerable. What is not known is neither threat nor challenge (in a sort of heroic sense, new worlds to conquer); it is simply part of what presents, the area where navigation is most risky. Not knowing is thus not a failure or a humiliation, but the occasion for an instruction: be aware of the solidity of your limits, and be aware also that those limits may shift in the encounter (though they will not disappear). And in this way, the acknowledgement of limit becomes in turn an occasion for expectation rather than simply anxiety or frustration.

Discussion of these borderlands between known and unknown is bound to be, at least indirectly, discussion of what model of the mind we are working with. The active, problem-solving mind which is constantly in search of closure and believes itself to be essentially active, probing and charting a passive landscape of phenomena, copes badly with the experience of limit or provisionality, with what Tubbs characterises as a power mediated only through shared dependence.

The point is that the creative scientific mind can move forward only if it is not so obsessed with solving a specific problem within its own frame of reference as to be incapable of recognising where the whole of that frame is breaking down. The major scientific minds of the modern age all seem to record similar episodes of – almost – drifting between worlds and languages as the impact of unmanageable phenomena is allowed full weight (full pressure). The mind engaged here is, if not exactly passive, at least engaged in a more complex way than the triumphant colonising intellect of a rather low-budget scientism. It is itself probed or tested, it is at risk. It has to enter a phase of dismantling or reconfiguring, without losing confidence that it is being shaped to a reality it does not control. In this sense, the pressures of unknowing become a testimony to the possibility of difficult truth – an idea that can be the most spectacular casualty of some expressions of postmodernism.

All of this means that when we turn to look at the issues around the knowability and unknowability of God, we need to look at what the

corresponding pressures are in the language of faith and theology. Religious language establishes itself as a candidate for being taken seriously in its claims to relate to reality when it displays this concern for difficult truth; thus, when it shows itself under pressure. For a Christian theologian, the New Testament is exemplary and revelatory because it displays such pressure, in the form of processes of concept development (Paul trying to clarify 'justification', the writer to the Hebrews attempting to fit the death of Jesus into a sacrificial economy which it simultaneously subverts), and of retelling or reconfiguring the classical deposits of meaning (Jesus's birth, life, death and resurrection as 'fulfilment', the Church as 'people of God', 'Israel').

It is not, however, a phenomenon peculiar to Christianity. To borrow a highly significant phrase from one of John Bowker's early works, the 'crisis of transcendence' is a phenomenon that can be traced in many contexts, with the reconfiguring of tradition that follows when some new agency presents itself as resolution of that crisis.³

To the extent that this reconfigured tradition claims to embody an irreversible breakthrough towards the truth, not just another optional perspective on it, it will need to devise ways of staying (as it were) on the edge of its own discourse, so that the nature of the crisis and its resolution can be re-enacted or rediscovered repeatedly.

This is definitely not to say that a tradition must go on re-inventing itself or that any statement of doctrine at any particular point in history is simply uncertain or revisable. It is to acknowledge that the truth-claims of a faith have to be seen as emerging from a point of 'epistemological extremity', as being the fruit of a certain sort of pressure, not as the result of detached speculation. That pressure has to be invited afresh, in speech and practice, if the language is not to slip back into corporate self-reference and self-reflection. Instead of doctrine and the claims for divine unknowability being in tension, as lazy descriptions often have it, they belong closely together. Without the need to respond and communicate coherently, unknowability would not be a problem or indeed for some an agony; without the difficulty posed by the unknown God, doctrine would be simply the code of a tribe.

This is in part why the non-religious observer finds theological language so frustrating. If it is doing its job, it is not only seeking to be coherent

and exact, as far as is possible, it is also in itself a practice, a kind of activity that reopens the place where the original pressure is felt. In the Christian context, biblical interpretation of a properly theological variety goes over the narrative of how the first believers in Jesus retold and reworked the story of the Bible as they had received it – over the patterns of typology and resonance that so mark the narrative of Christian Scripture itself.

And in our age, such interpretation has to confront at every point another sort of extremity, the historical outrage of anti-Judaism and its effects: a ‘pressure’ whose effects can still silence some kinds of speculative indulgence and reinforce a painful unknowing. The recitation and exegesis of the historic creeds recalls us to the point where a minimal and hard-won conceptual precision was forced out of a deeply conflicted body that continued to sense the instability of these resolutions yet found no way beyond or around them. The language and patterned action of baptism and Eucharist, unmistakably theological language in the full sense, seek again to bring the believer to the point where radical loss and recreation are made present, and God is ‘spoken’ of in and through the transitions of place, name and identity that the sacraments embody. While it is silly and dangerous to suggest that theological language has no call to precision or conceptual refinement, it is equally a mistake to read it or hear it as if it were not a kind of activity designed to bring you to recognition or change.

If a theologian is a servant in the way that Tubbs and Rose describe the good physician’s relation to medicine, his or her ‘authority’ will be much bound up with the capacity to bring the believer to the edge where pressure is discovered anew. The theologian thus needs to stand close to the others in the community of faith who habitually invite the pressure of God, ‘revisiting’ the original sites of revelation; there is a proper symbiosis between the conceptual worker and the contemplative. Both do what they have to do; but both are also – if we recall the language used about Gillian Rose’s doctors – involved in a sort of emancipation for others who own the language of the tradition. Both are there for the health and honesty of the community out of which they emerge. They enact for that community its own originating moments; or, to put it in

slightly different terms, they work out what the sacramental and symbolic action of the community regularly encodes and prevent it becoming formal and impersonal. They are part of that whole process which reminds the community, and anyone else who is paying attention, that to speak of God seriously is not just to repeat formulae but to seek, through words and practices, to return to a place where the mind is moulded.

So to bring together analyses of the different sorts of pressure on language represented by the poetic, the scientific and the religious/contemplative is not an idle comparative exercise designed to show that perhaps science isn't so bad after all or that religion isn't so irrational after all, or that (God help us) poetry is a licence for imprecision in any and every area of human discourse. It is to stake the claim that truthfulness in all our speech has something to do with a not always welcome vulnerability, and that authority and credibility are bound up with the skill of bringing others to a point of what some theorists like to call 'originary' pressure or tension. Knowing is undergoing;⁴ thus always moved from beyond the will, the controlled action of the mind. When our ambient intellectual culture is in love with will and control, with all the dangerous consequences that follow for our understanding of education, of liberty, of violence and so much else, this needs saying more than ever.

Notes

- 1 Nigel Tubbs, *Philosophy of the Teacher* (Oxford: Blackwell, 2005).
- 2 Ibid., p. 58, referring to Gillian Rose, *Love's Work* (London: Chatto and Windus, 1995).
- 3 John Bowker, *The Religious Imagination and the Sense of God* (Oxford: Clarendon Press, 1978).
- 4 See James Alison, *Undergoing God. Dispatches from the Scene of a Break-In* (London: Darton Longman and Todd, 2006), for a wonderful recent set of reflections on this.

INDEX

- abductive inference 5
- Abhinavagupta 193, 196–7
- absence
 - of God xviii, xix, xx, 6, 87, 92–3, 95,
 - 96–8, 99–100, 104, 180–2, 189, 191–9,
 - 208, 210, 218, 220, 222, 227–54
 - in Christianity 6, 249, 250
 - in Srivaishnavism 228–9, 237–48
 - taxonomy of 36–44
- actio in distans* 9–10
- Advaita Vedānta 193
- aether 2, 9, 10, 51
- affliction 115
- Alakiya Perumal Nayanar 245
- Alvars 6, 227
 - see also* Satakopan
- Anandabhairava 198
- Angela of Foligno 102, 112
- anthropological apophaticism 106–9, 119*n*24
- anti-neutrinos 58–9
- antinomies of reason 89
- ants 36, 42–3
- apophaticism
 - anthropological 106–9, 119*n*24
 - cosmological 74, 78, 81, 82
 - scientific 4, 143
 - theological xviii, 3, 73–4, 100–17, 117*n*6,
 - 124–5, 215, 219
- Aquinas, Thomas 107–8, 201, 213, 222–3*n*1
- architecture 14, 16–21
- art 14, 15–16, 164
- Artemis 126, 143
- the Ascension 29*n*8, 170
- asceticism 101
- astrology 45
- astronomy 45, 48
- atheism xix, 3, 28, 94, 100, 184
- AUB (Absolute Unitary Being) 23, 33*n*43
- Auden, W.H. 24–7
- Augustine 103, 108, 217, 218
- avatara* 4, 6, 22, 190
- Bacon, Francis 142, 143
- Barie J. 187
- Becquerel, Henri 51
- Bell, John 13–14
- Bertotti, R. 11
- beta-decay 55, 57–8, 59, 60
- Bethe, Hans 53, 55
- Bhabha, Homi 57
- Bhagavadgita* 23, 240
- bhakti* xix, 6, 29*n*9
- Big Bang 66, 70, 71, 74, 76, 77, 78–82
- birdwatching 38
- birth 75, 76
- blessings 190
- bodhisattvas 210
- body, God hidden in the 197–8
- Bohm, David 13–14
- Bohr, Niels xx, 12, 51, 89, 144
- Brahe, Tycho 48
- Brahman 4, 23, 95
- Brooks, C. 18, 19, 23
- Bruno, Giordano 48
- Buddha 202, 203, 204, 210
- Buddhism xix, 1–2, 95, 201–22
- Camden Society (Cambridge) 19
- Cappadocian Fathers 101, 105, 119*n*21
- causal interpretation 13
- Cavendish, Henry 49
- Chamberlin, Thomas Chrowder 49, 53
- Chandrasekhar, Subrahmanyan 53
- Christ, Jesus
 - ascension 29*n*8, 170
 - as bridegroom 112
 - crucifixion xviii, 111, 112, 113, 114, 250, 260
 - as guru 219, 221
 - humanity of 113, 162, 167–70
 - knowing God's through 131, 135, 218–21,
 - 222
 - resurrection 185, 260
- Christianity
 - and absence/withdrawal of God 6, 249,
 - 250
 - apophatic tradition xviii, 3, 73, 124–5
 - and architecture 18–21
 - asceticism 101

- dogmas 73, 84*n*15
 and gender 126, 136–9
 and God as creator 164, 166–70, 217–18, 220
 and human nature 105
 and ineffability of God 100
 and Moses 124, 130–6
 mysticism 100–17, 125, 133, 134, 140–1, 161
 and redemption 131
 supersessionism 124, 135
 and unknowability of God 171–2
 veil/cloud metaphor in xviii, 123, 130–9, 135, 140–1
 Chritchfield, Louis 53
 church architecture 18–21
 Clark, Kenneth 19
 Clement of Alexandria 101, 132
 cloud metaphor 8, 11, 30*n*16, 123–7, 132–4, 140–1, 142, 143–5, 218
 code 18, 19, 260, 262
 coelacanth 42
 coherence 30, 65, 71–5, 79, 81, 83*n*8, 84*n*14, 105, 257, 260, 261
 Coleridge, Samuel Taylor 18
 consciousness 68–9, 76–7, 82, 84–5*n*22
 God as 191, 193–5, 197–8, 199, 205, 206–9, 212–15, 217, 219, 220
 Copernicus, Nicolaus 48
 cosmology xvii, 60, 61, 63–82, 83*n*5, 84–5*n*22, 85–6*n*26, 194, 195–6, 197
 Cowan, Clyde L. 54
 creation xviii, xix, 2, 3, 5, 15, 28*n*2, 30–1*n*19, 70, 80, 81, 94, 95, 105, 107, 116, 124, 133, 164–6, 169, 170, 171, 177–8, 193, 194, 201, 203, 205, 208, 213–14, 217–18, 219, 220, 221, 225*n*25
 crucifixion xviii, 111, 112, 113, 114, 250, 260
 cruelty, divine 237–42, 239
 cryptic presence 40–1
 Curie, Pierre 52
 Cushing, J.T. 7

 d'Alembert, Jean Le Rond 8–9, 142–3
 dance 14
 Darwin, Charles 49
 Davis, Raymond, Jr 56
 de Broglie, Louis-Victor 14
 de Chirico, Giorgio 15
 delusion 211
 Descartes, René 48, 51
 Desika, Vedanta 241, 242

 desolation 251–3
 D'Espagnat, Bernard 89
 detachment 101–2, 109–11
Deus absconditus 25
 dharma 22–3, 33*n*40
dharmatā 202, 205
 dice, God plays 12, 23, 30–1*n*19
 Dickinson, Emily 27
δύκε 22, 24
 Dionysianism 101, 118*n*7, 133, 141, 143
 Dobie, Robert 110
docta ignorantia 116
 dogmas 73, 74, 84*n*15
 Dupré, Louis 100
 Durandus 19

 Earth, age of 49–50, 52–3, 59
 Eastlake, Charles 20
 Eckhart, Meister 3, 28*n*6, 99, 101–2, 109–11, 115
 ecology 36–44
 Eddington, Arthur Stanley 53
 eidetic reductions 68, 70, 71, 75, 77, 79, 81, 83*n*5
 Einstein, Albert xv, xvi, xx, 10–11, 12, 30*n*16, 30*n*19, 51, 52, 53
 electromagnetism 2, 9, 257
 electron cloud 144
 Elvis taxa 42
 empiricism xviii, 5–6, 63–4, 66, 68, 70, 71–2, 74, 77, 79, 83*n*8, 88, 89, 90, 166, 167
Encyclopaedia of Ignorance 11
 energy conservation 49, 50, 55, 59
 the Enlightenment 142, 143
 enlightenment (in Buddhism) 203, 206–7, 209, 211–12, 214–15
 Eriugena, John Scottus 105–7, 119*n*24
 ether *see* aether
 ethics xv, 23, 81, 85*n*26, 87, 101, 172
 Eucharist 221
 evolution 50, 93
 Exodus 123, 127–30, 134, 135, 138
 experiments 47
 extinction 41–2

 Fa-Xian 190
 faith 73–4, 91, 92, 113, 114, 162, 166, 167, 168, 212, 221, 254, 260
 fallibilistic absolutism xvii, 12
 false absence 40–1
 falsification 4
 Faraday, Michael 9

- femininity 125–6, 133, 134–41
 Fermi, Enrico 55
 Feynman, Richard 144
 firstness 163
 Foulis, William 41
 Fourier, Joseph 50
 freedom 90–1, 92–3, 94–5
 Freud, Sigmund xiv, 4
 the future xv
- Galileo Galilei 7, 48
 Gallus, Thomas 133
 Gamow, George 53
garbhagṛha 17–18
 Gell-Mann, Murray 47, 57
 gender ambiguity 125, 126, 135, 139, 140, 141, 145
 geology 49–51
 Glashow, Sheldon Lee 58
 God
 absence of xviii, xix, xx, 6, 87, 92–3, 95, 96–8, 99–100, 104, 180–2, 189, 191–9, 208, 210, 218, 220, 222, 227–54
 characterisations of 3–4, 16
 as consciousness 191, 193–5, 197–8, 199, 205, 206–9, 212–15, 217, 219, 220
 as creator xix, 2, 94, 95, 164–70, 169, 171, 193, 201, 203, 205, 208, 213–14, 217–18, 219, 220, 221
 and detachment 101–2, 109–11, 212
 hiddenness of 24, 176, 196–8, 203, 204, 208, 210–12, 218, 220, 221–2
 as human creation 3
 ineffability of 100–1, 103–9, 175
 in Nature 176–7
 and obedience/disobedience 92–3, 95
 plays dice 12, 23, 30–1#19
 in poetry 14, 15, 22–7, 175–86, 249
 as teacher 201, 204, 205, 209–11
 unknowability of xvii–xix, 1–2, 5, 6, 14, 16, 189, 197, 198, 209, 211, 220, 237, 260
 withdrawal of 6, 102, 111–16, 161, 189, 191–2, 196, 199, 210, 248
 Goddesses 189, 194, 195, 198, 199
 Godhead, barren 3, 28#6
 Gopis 28–9#8
 Gothic revival architecture 18–21
 gratitude 208, 212, 214, 218, 220
 gravity 7–14, 49
 Great Auk 41, 42
 Greek tragedy 22
 Gregory the Great 112
 Gregory of Nyssa 103, 105, 106, 132–3, 134, 141
 gurus 208–11, 219, 220, 221, 222
 Guyon, Madame 112
- habitat 37, 39
 Harkins, William Draper 53
 Hawking, Stephen 11–12, 70
 Heaney, Seamus 38
 Hegel, Georg 93
 Heisenberg, Werner 12, 13, 14, 51
 heliocentric hypothesis 48
 helium 53
 Helmholtz, Hermann von 11, 49, 53
 Herschel, John 49
 Hick, John 92
 hidden law 22, 24–5, 26
 hidden universes 12
 Hinduism 4, 190–9
 see also Shaivism; Srivaisnavism
 Hobbes, Thomas 9
 Holy Spirit 162, 170
 Holy Trinity 3, 28#6, 112, 134, 199
 Hopkins, Gerard Manley 24, 249
 humanity, in God's image and likeness 105, 116
 Husserl, Edmund 66, 80
 Hutton, James 49
 Huyler, Stephen 16–18
 hypostasis 66, 67, 68, 69, 75
- icons 15, 190, 191
 identity 64
 idolatry 103, 129, 130, 135
 Ignatius Loyola 251–3
 illumination 216, 218, 220
 immanence 65, 66, 68, 76, 219, 221
 incarnation 4, 65, 67, 68, 69, 74, 75, 76, 77, 80, 130, 132, 162, 166–71, 190
 induction 8
 interiority 213, 217
 Isaiah 99, 249–50
 Isis 143
 Islam 162, 164, 165, 166, 169, 192
 Israel, veiled 131, 138–9
- Jacob of Serugh 135
 Jacopone da Todi 113
 Jainism xix, 1–2, 27–8#2
 Jayaratha 197
 Jeans, James 53
 John of the Cross 6, 27, 103, 113, 249
 Judaism 162, 165, 261

- and cloud/veil metaphor xviii, 123–30, 135–40
- and God as creator 164, 166, 169
- Kabbala 140
- Kālī 194, 198
- Kant, Immanuel xvii, 6, 87–98, 143–4, 163
- karma 23, 33*n*42, 211, 212, 228
- Kashmir Shaivism 191, 192
- Kaumārī 198
- KBRP (*Kun byed rgyal po*) 203–15, 217, 219, 220, 221, 222
- Kelvin, Lord xx, 8, 11, 30*n*16, 49, 50–1, 52, 53, 144, 159*n*93
- Kepler, Johannes 7, 48
- Kierkegaard, Søren 97
- kinetic theory 51
- Krama 194, 198
- Krishna 6, 28–9*nn*8 & 26, 189, 200*n*1, 229–30
- Ksemarāja 193–5, 198, 199
- Laborde, Albert 52
- Lambert, Joyce 35, 36
- Lazarus taxa 42
- light, speed of 51
- liturgy 73, 74, 172, 190
- Loneragan, Bernard 6
- Luther, Martin 102, 112, 114
- Mach, Ernst 11
- Mackenzie, Compton 21
- Mahabharata* 22, 23
- Mahārtha 194
- Mahāyāna Buddhism 202, 210
- Manavala Mamunikal 247
- Marcel, Gabriel 63
- Marie de l'Incarnation 112
- Marion, Jean-Luc 108–9
- materialism 237–9, 251
- Maxwell, James Clerk 2, 9
- maya* 23–4, 33–4*n*44
- Mayer, Julius Robert 49
- mechanism 9–10, 49, 54, 71
- Mechthild of Magdeburg 112
- medical science 258–9, 261
- memes 4
- Metaphysical school of art 15
- Michelson–Morley experiment 10, 30*n*16, 51
- migrations, animal 40
- Mikhaev, Stanislav 57, 58
- Milarepa 210
- models, scientific 46–7, 60
- morality xv, 23, 85*n*26, 90, 91–2, 93, 94–5, 97, 130, 142, 203, 209, 248
- Moses
 - and cloud/veil 124, 125–6, 128–30, 131–4, 135–9, 140
 - as human locus of divine presence 123, 124, 125, 128–30, 145
 - symbolic femininity 134–6
- muons 57
- music 14
- mysticism 99–117, 161
- mythology 14
- N-rays 2
- Nanjīyar 242–3, 246
- Narayana 227, 248, 249
- Nārōpa 210
- natural history 35–44
- Nature 8, 47, 126, 133, 141–5, 177
- Neale, John Mason 19
- negativity, spiritual 100–17
 - see also* apophaticism
- neutrinos 54, 55–6, 57–9, 60
- Newman, John Henry 104
- Newton, Alfred 42
- Newton, Isaac 7–9, 10, 47, 48–9
- niches 37, 39
- Nicholas of Cusa 106, 215–19
- nirvana 95
- non-existence 1–2, 64
- Norbu, Namkhai 214, 225*n*25
- noumenal world 87, 88, 90–1, 143–4
- novels 14
- nuclear physics 51–2, 54
- offerings 190
- O'Hanlon, Redmond 38
- O'Keefe, Martha 27
- Original Sin 208
- palaeontology 49
- Palamas, Gregory 203, 204, 205, 207, 214, 218
- paradise 93
- particle physics 54–60
- Paul 124, 125, 126, 130–4, 135, 136, 137–8, 139, 140, 145, 220–1, 260
- Pauli, Wolfgang 12, 13, 14, 54, 55, 60
- Peierls, Rudolf 55
- Peirce, C.S. 163
- Penrose, Roger 71
- Periyavaccan Pillai 239
- Perrin, Jean 53

- phenomena xvii, 2, 7, 8, 13, 46–7, 48, 205, 257, 259
 phenomenal world xvii, 88, 90–1, 97
 phenomenology 65, 66, 75, 77, 78–80, 82, 83*n*5
 Philo 124, 125, 132, 141
 phlogiston 2, 257
 Pillai Lokacarya 243, 244–5, 247
 pions 57
 Planck, Max 11, 51
 planetary orbits 48
 Platonism 124, 132, 164, 165
 Plutarch 143
 poetry 14, 15, 22–7, 175–86, 249
 Pontecorvo, Bruno 57
 Popper, Karl 4, 54
 Porete, Marguerite 103, 112, 118*n*14, 141
 Pouillet, Claude 49
prakṛiti 2, 18, 28*n*3, 205, 206
 prayer xviii, xix, 5, 16, 17, 73, 74, 179, 182–3, 184, 212, 221
 pre-literate cultures 93
 presence in absence 65, 68, 69–70, 73, 74, 78, 81, 219–20, 245
 presence in presence 70, 81
 probability 13
 Pseudo-Dionysius 101, 124, 133, 141
 Pugin, Augustus 18, 33*n*37
puruṣa 2, 18, 24, 28*n*3

 quantum physics 11–12, 14, 51, 89–90
 quantum universes 70
 Quint, Josef 109

 radiation, black body 51
 radioactivity 51, 52–3, 55, 59
 Rahner, Karl 104, 107–8
 Ramanuja, Vedanta 190–1, 213, 238–9, 241–2
Ramayana 22–3, 240
 real presence, doctrine of 19
 reason (Kantian) 88, 90, 91, 97, 144
 reincarnation 28, 33*n*42, 192, 194, 199
 Reines, Frederick 54
 religion xiii, xiv
 religious experience xvii, 87, 96, 224*n*13
 religious knowledge, and unknowability 95–8, 161–73
 religious language 260, 262
 religious practice *see* worship
 Resurrection 185
 revelation xviii, 3, 5, 28*n*6, 37, 108, 123, 124, 126, 128, 131, 132, 140, 148*n*12, 166, 169, 172, 173*n*3, 189, 191, 192, 194, 195, 201–2, 217, 218, 261
 Rodin, Auguste 15–16
 Röntgen, Wilhelm 51
 Rose, Gillian 258, 261
 Rosenfeld, Leon 14
 Roy, Ram Mohan 191
 Rutherford, Ernest 52–3

 sacramentality 19
 sacraments 20–1, 135, 221, 261, 262
 Śākyamuni Buddha 210
 Salam, Abdus 58
 Samantabhadra xix, 204–9, 212–15, 219, 225*n*25
 Samkhya 2
 Sarasvathi, Dayananada 191
 Satakopan xix, xx, 227–8, 229–48, 249, 250, 251, 253
 Schrödinger, Erwin 51
 science
 interconnections and collaborations 61
 and Nature's veil 141–5
 and teleology 78
 and unknowability xvi–xvii, 2, 6, 46–7, 50, 163–4, 171–3, 179, 257–9
 see also individual disciplines
 sculpture 15–16
 secondness 163
 Self 213
 self-centered desire 96
 Shaiva Siddhānta 192
 Shaivism 192–8
 Shelton, Richard 40
 Shiva xix, 17, 31–2*n*26, 189, 192–6, 199, 200*n*1
 Sistine Chapel 187
 Smirnov, Alexei 57, 58
 Soddy, Frederick 52
 solar astrophysics 57–8
 solar system, age of 53
 solipsism 213–14
 Somananda 196
 somatic exploration/exegesis xiv
 Somayaji, Nilakantha 48
Song of Songs 125, 132–3, 135–6, 139, 141, 249
 soteriology 192
 spacetime 10, 11, 167, 168, 169, 170
 spacio-temporal framework 167–9, 170
 Spenser, Edmund 41
 spirit world 93–4
 spiritual information xiii, xiv, 14, 21, 22, 26
 spiritual reality xviii, xix–xx, 87, 93–4, 95
 Sri 227

- Srivaishnavism 227–9, 237–48, 249
 statistical absence 37–8
 strategic absence 39–40
 Strawson, Peter 90–1
 string theory 12
 subjectivity 63, 64, 65, 69, 70, 74, 76, 78, 79,
 80, 172, 196, 197, 212
 subordination 125–6
 suffering 111
 Suger, Abbot 21
 Sun, energy from xvi, 45–61
 Swedenborg, Emanuel 87
 symbolism 19, 74, 81–2, 262
see also cloud metaphor; veil metaphor
synagoga 131, 134, 151*n*33

 Tagore, Rabindranath 23–4
 tantras 192, 203, 204
tathāgatagarbha 202–3
 Tauler, John 113–14
 taxonomy 35–44
 Taylor, Jeremy 19
 Taylor, John 11–12
 Taylor, Mark 3
 teleology 74, 78–80
 Teller, Edward 53
 temples, Indian 16–18
 Templeton, John xiii
 temporality 70, 83*n*5, 83*n*6
 Tennyson, Alfred, Lord 27
 theodicy 111, 191
 Thérèse of Lisieux 114
 thermodynamics xv, 49, 51
 thirdness 163
 Thomas, R.S. xviii–xix, xx, 41, 175–86,
 249
 Thompson, Francis 208
 Thomson, William *see* Kelvin, Lord
 Tibetan Buddhism 203, 204, 210
 Tiru Kurukai Piran Pillan 237–8, 239–40,
 246
 Tirumankai Alvar 244
Tiruvaymoli song cycle 227–8, 229–37
 tradition 73
 tragedy 22
 transcendence
 in cosmology 81–2
 of the empirical 70–1
 of evolutionary origin xiii–xiv
 Kant on 95–6
 theological 74, 216–17, 219, 222
 truth 26, 46, 47, 48, 72, 73, 74, 75, 77, 81,
 82, 95, 96, 97, 100, 142, 143, 175, 190,
 195, 197, 199, 201, 204, 205, 206, 211,
 259, 260, 262
 Tubbs, Nigel 258, 259, 261
 Turner, Denys 101

 understanding (Kantian) 88, 90
 undiscovered absence 42–4
 universe
 God hidden in 177, 196–7
 identity of 64–8, 82
 intelligent 67
 origin of 68–72, 75–8, 81, 82
 unity of 65, 81
 unknowability of 4–5, 6, 63–8
 the unknowable/unknown xv–xvi, 1–7
 Upanishads 189

 Vatakku Tiruviti Pillai 238, 240–1
 Vaughan, Henry 15
 veil metaphor xviii, 123–31, 134–45,
 218
 veiled reality 8, 24, 33*n*44, 89, 90
via eminentiae 3
via negativa 3, 4, 219
 Vigri, Caterina 112
viraba-bhakti xix, 6, 29*n*9
 Vishnu 6, 22, 28
Visnudharmottara 15, 19
 volitional absence 40–1

 Waterston, John James 49
 wave mechanics 13–14
 Webb, Benjamin 19
 Weil, Simone 99, 114–15
 Weinberg, Steven 58
 Weizsäcker, Carl Friedrich von 53
 Weyl Curvative Hypothesis 71
 Wheeler, John 89
 William of Ockham 47
 Wolfenstein, Lincoln 57, 58
 Wolfson, Elliot 140
 women, veiling of 125–6, 136–7, 139
 worship xviii, 5, 15–16, 19, 20, 21, 96, 190,
 191, 214
 Wyatt, James 32–3*n*34

 X-rays 51

 Zion, Mt 139–40